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Mac ADDICT 24

AUG/98

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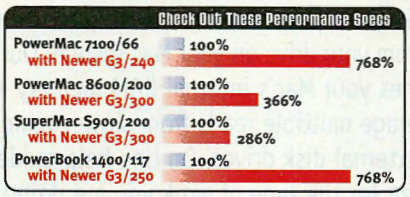


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"You just got a new Mac two years ago, you'll have to wait at least another year."

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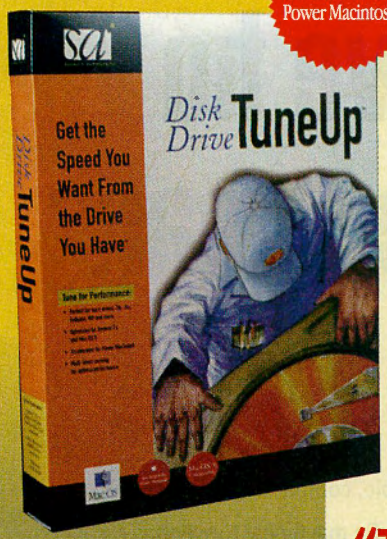


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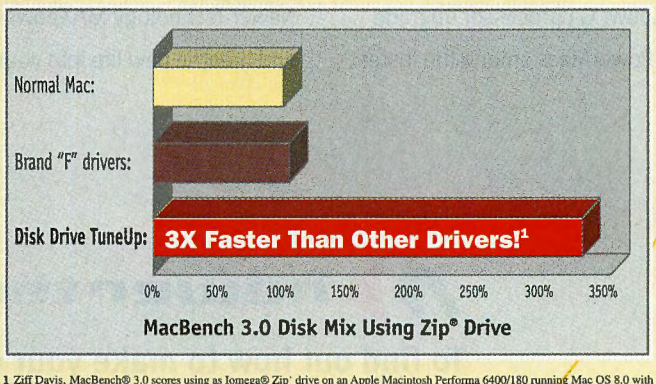
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1 Ziff Davis, MacBench® 3.0 scores using as Iomega® Zip® drive on an Apple Macintosh Performa 6400/180 running Mac OS 8.0 with 24 MB RAM and VM on. All products used in this test were shipping versions available to the general public. This test and its results were not verified by Ziff-Davis. Individual gains depend on the type of media used, caching parameters established and system specifics.

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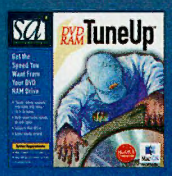
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WE KEEP PUTTING QUARTERS IN, but nothing happens.

AUGUST 1998

MacADDICT 24

highlights

22 The MacAddict Tip-Off

We scoured the land for hundreds of the absolute best Macintosh tips, and we put them together just for you—great advice on everything from graphics to games to audio. You're welcome. Now go clean your room. **EDITED BY NIKKI ECHLER**

38 Subliminally Subvert a PC User

Sometimes subtle means are the best means. Send no money now—or ever. **BY NIKKI ECHLER**

40 This Old Mac

The PowerBook 520/540 line—code-named Blackbird—was the much-anticipated '040-based PowerBook back in its day. We show you how to get your bird singing a whole new tune. **BY T. KELLEY BOYLAN**

power up

76 How to Keep Your Mac Virus-Free

Between macro viruses and the new AutoStart Worm, all you need is the Mad Hatter for one heck of a tea party. Here's how to get rid of your Mac's uninvited guests. **BY KEVIN SAVETZ**

78 Unleash QuarkXPress Style Sheets

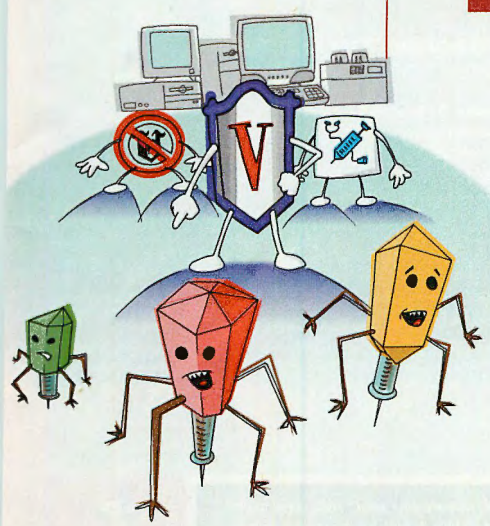
Style sheets can save you lots of time, but many folks don't bother to use them. Here's how to get started. It's easy! **BY ELYSE CHAPMAN**

80 How to Share a Printer

You can make those serial printers—inkjets mostly—available to the masses on your network. Equality for all! **BY BUZ ZOLLER**

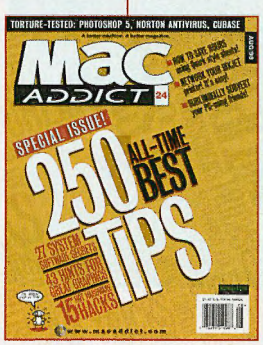


YOU ARE GETTING SLEEPY...so very sleepy...



IF YOU LIVE UNDER OUR ROOF, you have to live by our rules. And where did you get those needles?

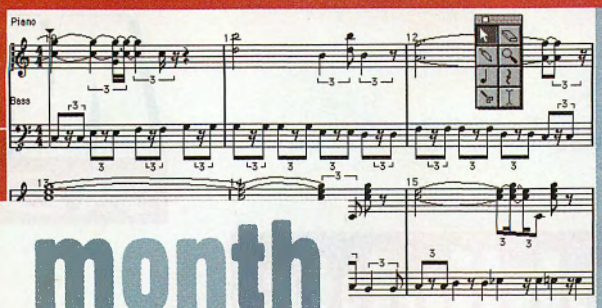
OVERPRINTING INSPIRED by Margo Chase. Angled grid inspired by Dutch and Russian designers. Thanks to Ritchie Lesovoy for his bravery.



NOT IN THE FACE! Not in the face! I'm telling Mom!



REVEALED! Gil Amelio's secret plans for naming the Mac OS!



every month

12 Editor's Note
Dave shares his thoughts so you don't have to.

14 Letters
Again with the dots on the spine—we've told you, they don't mean anything! Or maybe they do…

16 Get Info
Motorola's AltiVec technology is posed to pants MMX and laugh at it. Plus, Apple's icon garden disappears as its logo colors bleed away, and we show you how to get your own @mac-addict.com email address.

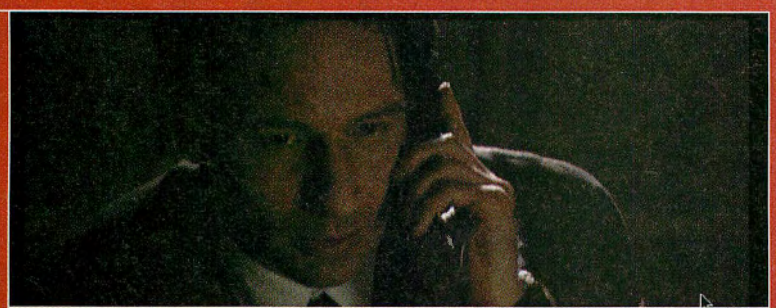
20 Cravings
A power strip to kill for, the most amazing digital camera, a stylish PIM, a monster mail client, and multimedia speakers that will get you booted from your home—it's all cool drool gear.

44 Reviews
Photoshop 5.0 is out, and we put it through the wringer to see what would squeeze out. Ewww! We also beat on Animation:Master 98, GoLive CyberStudio 3.0, Stylus Photo EX, Diablo, Cubase VST, and two Mactell video cards.

74 Fun & Games
Games on the Mac are coming back! We have previews of seven (seven!) hot titles on their way soon to a Mac near you.

84 Ask Us
Learn how to turn off that annoying "Buy QuickTime Pro Now or Your Toes Will Fall Off" message. Plus, we tell you how to untar a TAR file, get System 6.0.7, and clean your PowerBook screen.

112 Shut Down
Do not drink hot liquids while reading the last page. Oh, and do not operate heavy equipment after taking antihistamines.



THE TRUTH IS OUT THERE, SCULLY. And it's on the Mac.

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Volume 3, Issue 8
MacAddict (ISSN 1086-5438) is published monthly by Imagine Media, Inc., 150 North Hill Dr., Suite 40, Brisbane, CA 94005, USA. Periodical-class postage paid at Brisbane, CA, and at additional mailing offices. Newsstand distribution is handled by Curtis Circulation Co. Basic subscription rates: one year (12 issues + 12 CD-ROMs) U.S. $39.90, Canada $43.95, U.S. prepaid funds only. Canadian price includes postage and GST 128220688 IPM 0962392. Outside the U.S. and Canada, price is $53.95, U.S. prepaid funds only. POSTMASTER: Send address changes to *MacAddict*, P.O. Box 58251, Boulder CO 80328-8251. Imagine Media, Inc. also publishes *boot*, *Business 2.0*, *Gamebuyer*, *Next Generation*, *PC Accelerator*, *PC Gamer*, and *PSM*.

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So, Rob, where's your goat? Well, show me its ass and I'll kick it. And, for the record, *Species* is the worst movie ever made.



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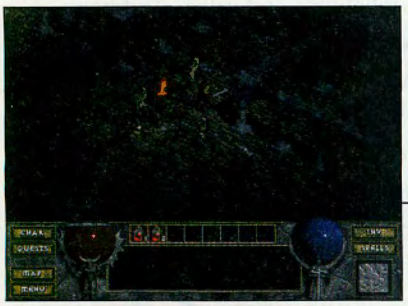
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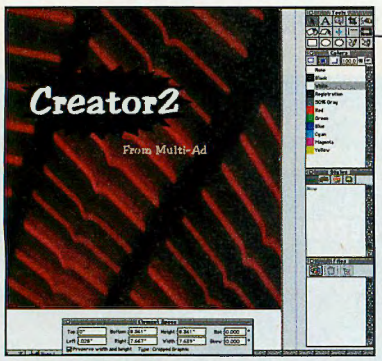
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the disc



OH, NO! Where'd I put my can of Skeleton-B-Gone?



MULTIPLE PAGES, scripting—it can even do starbursts!



WHERE'D ALL MY PAINTINGS GO? I've been robbed! Oh, sure, they left the glass coffee table and the stained couch.

highlights

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DenebaCAD and Canvas 5

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RedJack

Here's a peek at a new game due to hit the shelves this month. Ride the high seas with this 3D, first-person-perspective adventure game. Animated, interactive characters await you as you journey through the West Indies in search of lost treasure. Swashbuckle your way through cutthroats, assassins, and ghosts. Aargh, matey!

goodies

From Apple

AudioTuneUp 2.0, Battery Recondition, HyperCard 2.4, Personal Web Sharing 1.5, QuickTime 3.0



THAT'S RIGHT, PAL. I've got a big wooden club, and it's just for you.



WADE PAYS BIG BUCKS, and thus a new disc editor arrives.

WHENEVER you see this icon in the magazine, pop in The Disc for a special treat.



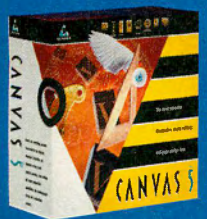
If you think it takes several graphics programs to create an ad like this, all we can say is, "Sorry."

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"One look at Deneba Canvas' long list of features, and you'll see the great value stuffed in this single box. Canvas... has raised the bar of excellence for all graphic applications." **Desktop Publishers Journal**

"[Canvas] gives you integrated photo editing, desktop publishing and illustrating. Most software offers you any one of these capabilities, but not all three. Having this kind of versatility in a single application makes it easy to seamlessly assemble and design an entire project from beginning to end." **PC Photo**

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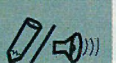
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Information
MacGloss 2.4.1



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Text Processing
Rick's Free Fonts, Scriptware, Text Cleaner Lite



Updates
Conflict Catcher 4.1.1



User Interface
Chronomenon 2.0.1, DP Autochanger, Droplet for Kaleidoscope, Rick's StartupScreens 2, Virtual Desktop 1.9.2 Y2KCD 1.0.2



Utilities
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Never done that before? Catch your breath, it's here! Just fire up our application on The Disc and be stunned!

the web

highlights

You and Me Against the Macworld

Join us for the all-new New York Macworld Expo experience. Our continuing show coverage kicks off with July 7's keynote, followed by the clamor and chaos of the show floor.

New Iconfactory site

Iconfactory has totally redesigned its site, and it rocks! So the site now sports frames—big deal. It is elegant, easy to navigate, and offers tons of great new icons.

Visit the PowerBook Shelf

Be sure to look up our Web Exclusive on Extreme PowerBooks! You'll meet the DeepSeaBook pictured here, plus four of its exotic friends, in our fanciful gallery of high-concept laptops.





OUR CLASSIC COLORS are back as of this writing. As we ready for next issue's anniversary nostalgia binge, we've reinstated the good ol' green and purple.

WHENEVER you see this icon in print, visit www.macaddict.com for links and additional resources.

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http://www.evangelist.macaddict.com
EvangeList is the official home of Guy Kawasaki's mailing list, bastion of Mac advocacy and scourge of the infidel.

http://www.maccentral.com
Every day, MacCentral stuffs you to the gills with hot news, product announcements, and nifty special reports.

http://www.macsurfer.com
MacSurfer's Headline News constantly scours the Web for all the news that's fit to link on Apple and the Mac universe.

http://www.versiontracker.com
VersionTracker's up-to-the-minute listings keep tabs on every Mac software product that's new, improved, or in bleeding-edge beta form.

http://ogrady.com
O'Grady's PowerPage is the ultimate resource for PowerBook users, with notebook news and mobility message boards.

http://www.imgmagazine.com
Inside Mac Games is a monthly CD-ROM magazine devoted to Mac games, with its own news-packed Web site.

http://www.infoxczar.com/atat
As the Apple Turns tunes in every day for the latest twists and turns of the Apple Computer soap opera.

http://www.everymac.com
EveryMac's exhaustive catalog of Macs and Mac compatibles provides complete specs and technical data (even on the semi-legendary Outbound notebooks!).

http://www.iconfactory.com
Iconfactory turns your drab desktop into a pixelated paradise with its fabulous selection of hand-crafted icons.

http://www.saracen.com/applejedi.html
AppleJedi is the tub-thumping e-zine for evangelists, developers, solutions providers, and Defenders of the OS.

EXPERIENCE PAYS OFF: THE 3X ZOOM.

And we've had more than enough experience, 78 years to be exact, to make it all worthwhile. With an insistence on superior optics, an obsession with design and size, a never-ending search for the optimum in effortlessness as well as ergonomics, it's little wonder that Olympus has pushed the 35mm envelope as far as we have. And now all that know-how and wizardry has been poured into our D-600L digital camera. Yes, it looks like a 35mm and feels like a 35mm. And often acts like one, too.



Your computer, our camera and bundled software. Now crop, enlarge, enhance, retouch, have fun.

The new 3x zoom lens is razor-sharp, seven element Olympus all glass aspherical, F2.8, autofocus, with macro. The equivalent 35mm zoom focal length: 36mm to 110mm.

Some other distinctions: a mere 16.5 ounces in weight; center weighted metering as well as spot metering for difficult lighting conditions; dioptric viewfinder correction; +/- 3 step exposure correction; a four mode auto flash with red-eye reduction.

MEGA PIXELS

Mega is an understatement. The CCD resolution on the D-600L is an astounding 1.4 million pixels, creating images at 1280 x 1024 pixel resolutions. Speaking of images, the D-600L uses a high-quality progressive scan CCD that captures the entire image in a single pass. Meaning you get what you should get: the highest-quality film-like images without any annoying ghosting or color bias traits that often appear in competitive sensor technologies.



THE DIGITAL CAMERA REDEFINED.

Actual dimensions of the D-600L are 4.5" (w) x 3.25" (h) x 5.1" (d). So it's easy to carry around.

SHOOT TILL YOU DROP

Shoot, shoot, shoot. There are absolutely no restrictions on the number of photos you capture with our camera. The removable 4 megabyte SmartMedia™ card gives you up to 49 standard quality images. Simply download the images from the card to your computer by means of the serial cable or the optional PCMCIA and 3.5" floppy disk adapters. Or you can insert a new SmartMedia card anytime and keep on shooting.

THE TTL IS VIP

A Very Important Part. It's a Through The Lens single lens reflex viewfinder so you're shooting photos as if you were looking through a 35mm SLR camera. Crisp, exact, infinitely superior images can be expected. In addition, there's a high definition LCD screen that you can use for reviewing, deleting or tagging images for printing.

A DIRECT CONNECTION

Finally, digital independence! Now you can connect the D-600L, or any Olympus digital camera, directly to our P-300 Personal Photo Printer. In just minutes you'll be able to print photo quality images directly from the camera.



Connect the camera to our P-300 printer and presto! Get the photo you want, when you want it.

A FEW NOTABLES

Note: our more affordable D-500L also has a 3X zoom lens with an equivalent 35mm focal length of 50mm to 150mm and a resolution of 1024 x 768.

Note: in the last year, Olympus digital cameras have won more awards than any other digital cameras. Journalists and industry experts are already hailing our new D-600L and D-500L as benchmarks in performance and design.

Note: you can see for yourself how rich and sharp the images from our digital camera really are. Just visit us at www.olympus.com. Or call us at 1-800-622-6372. We'll be pleased to answer all your questions.

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editor's note



Apple execs suck the fun out of the Apple campus.

In some ways, it's like going from the magical land of Oz back to Kansas. After living in a Technicolor wonderland complete with two-dimensional representations of arguably the company's most significant contribution to the world of operating systems, the entire Apple campus seems to be waking up from its head-trauma–induced dream to find itself back in a sepia world.



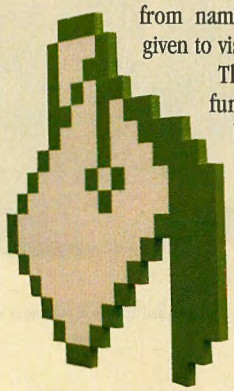
Hot on the heels of the NeXT acquisition a year and a half ago, we visited the NeXT offices in Redwood City to find out what the deal meant for the Mac. During that time, we got a glimpse into the stylish NeXT headquarters. Sleek, dark, and replete with edges, those offices were chic to a fault. And the bathrooms...well, we won't go too far into that, except to say that they, too, fit in with the classy interior.

Since coming to Apple, Jobs has busied himself remaking the company's image, trying to hold on to the best of the brand while jettisoning the outdated and useless detritus of 20 years of business. Apparently, that includes the familiar six-color logo and the icon garden, both hopelessly mired in the past. They're just too darned fun, and we can't have that!

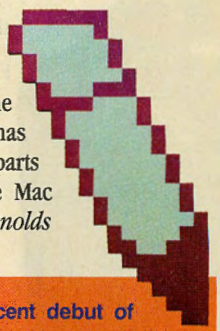
Being the Apple followers that we are, we've decided to follow suit. Starting immediately, the following changes will take place in the pages of *MacAddict:*

- ☞ We will be moving to a black-and-white format to make a clean break with the gaudy colors of past issues. The logo will be a translucent gray we're calling "Hail."
- ☞ All occurrences of the words *phat, frag, freakin' awesome, tweak, kick ass, luscious, sexy,* and *drool* are hereby banned. We will no longer use adjectives of any kind. The page space that they occupied cost the company too much money.
- ☞ Official editorial dress code will consist of black shirts (which was already our unofficial code, but we figured it should be official). More than three violations will result in mandatory turtlenecks and chinos for all.
- ☞ On the *MacAddict* Web site, only earth tones will be allowed, and the colors will be rotated on a strict three-day schedule.
- ☞ Max's name will be changed to Walter. Do not call him Walt.

For the sarcasm-impaired, this is a joke. Unfortunately, what's happening at Apple is not. Oh sure, the company has had back-to-back profitable quarters, the stock price is up, the product lines are amazingly cool (and cheap), market share is climbing, and realistic (and awesome) system-software plans are in place, but the company seems to have lost its sense of humor. Now I'm not suggesting that Apple sacrifice these real—and desperately needed—business accomplishments for the sake of some fiberglass sculptures, but it is important that Apple remain a sometimes-goofy place for its talented employees to work and play, a place where folks still create balls made from name tag stickers given to visitors.



This sense of fun was what brought many of us to the Mac in the first place, and it's important that Apple understand that. Remember, this is the company that brought us Clarus (complete with official tech notes), Area 51 as a location in the Newton OS, and the infamous Sosumi system beep. This sense is still alive in such products as the iMac, and the upcoming Allegro system software release is rumored to have a new Appearance Manager, the sole purpose of which is to let users change how their Macs look. Let's hope the somberness that has descended over certain parts of Cupertino leaves the Mac untouched.—*David Reynolds*



It is important that Apple remain a sometimes-goofy place for its talented employees to work and play.

Radio Days

With the recent debut of Imagine Radio—and, incidentally, the MacAddict Hour—we've been having a ton of fun talking on the radio. We've even started hearing from readers-turned-listeners who have taken the time to install the Imagine Radio player and check out our show. Since you're a pretty sharp bunch out there, we'd like to hear from you about topics for the radio show. Is there a Mac addict you'd like to suggest we talk to for his or her exemplary service to the Mac cause? Is there a company we should prank call? Do you have a vexing question about your Mac you'd like to have addressed on the air?

If so, send us email at macaddict@imagineradio.com. We'll be doing some new and exciting things on the radio, and we want you to be a part of it. Send in your ideas, and you may hear them on the air. Hey, we may even give you a call and let you clutter the wires with your own brand of Mac vision. To check out Imagine Radio, point your browser to http://www.imagineradio.com. Or you can check out our old MacAddict Hour shows at http://www.macaddict.com/radio/radio.html, where we archive them all in QuickTime format. You may even want to look at last month's CD-ROM for some archived shows.

Think Kensington.



Here's to the crazy ones. To those who've stuck with their Macs through thick and thin. To those who've endured the scorn of PC geeks, and the infuriating rise of the Redmond Empire. We salute you Mac loyalists, and we're going to keep right on bringing you the very best in Mac input devices—like our high performance Turbo Mouse® and Orbit® trackballs, our wildly popular Mouse•in•a•Box, and our new, smartly-designed Keyboard•in•a•Box™. After all, it's not just craziness that makes Mac users so resolute. It's also your totally superior intelligence.

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letters

No dots, no icons, and far too many occurrences of the letter e.

This Month

WRITE TO US: MacAddict, *150 North Hill Drive, Suite 40, Brisbane, CA 94005, or email to letters@macaddict.com. FOR CD PROBLEMS: Go to http://support.imaginemedia.com. FOR SUBSCRIPTION QUERIES: Please call (toll-free) 888-771-6222.*

GET ON, GET ACTIVE. Talk to us and to other Mac addicts at the Web site.

You're Just Delusional

There are no dots! No dots! No dots on the spine. January issue—no dots! Okay, I gotta calm down now. They're just dots. But they're not there on the spine of the January issue! They're always on the spine! Ahhhh! Why aren't there dots? It's a contest, isn't it? You wanted to see who would notice the change, didn't you, and give whoever noticed a prize, right? And the prize would be a brand-new 300MHz G3, wouldn't it? I won! I won a brand-new computer! Right? Right? Or am I just delusional?

—Daniel "G3-freaking addicted" Hamilton

The six spine dots for the January issue were requisitioned to add to the over 55,000 pixels that were needed to create Steve Jobs face. Thanks for noticing!

Depends on the Neighborhood

It's either a symptom of my advancing age or of my Mac addiction, but I found the Apple Studio Display as sexy as the model displayed on it. Unfortunately, however, your trotting out of this salacious photograph was unaccompanied by a price, leaving me with a question: Am I going to have to knock over a bank to get one, or just stand outside the post office on the day the little old ladies get their pensions and mug a couple? Please advise.

—Ed Ward

The retail price is $1,999.

Here's a Tissue

When Steve Jobs first took over Apple, I knew something bad was going to happen, but did he have to take away the sacred icons? Those



icons are the very heart and soul of Apple, and without them Apple's just another dumb company (kind of like Microsoft). Now, if you'll excuse me, I need to go cry.

—Robert Goodwin

Weeee Don't Know Eeeeeitheeeeeer

Doeeeees anyoneeeeeee know wheeeereeeee I can geeeeeet a keeeeeyboard that doeeeeeesn't have a sticky letter *eeeeeeeeee?*

—Bryce Bagwill

Where's Our 10 Percent?

While looking through the games available on one of your early CDs, I came across Star Fighters 1.01, which I liked, and I paid the shareware fee for it. Later, I received an email from the author of Star Fighters, Laurie Murphie, and soon we became good friends. We started a company called Foxchange Shareware. Fourteen months later, we have completed some impressive games: Star Fighters, Mr. Cat's Quest, Bob versus the Aliens, Cave Dig, Street Rumble, and Blobs. We have had more people join our company and we have a bright future ahead. We are currently making several more games—Station Devastator, Bob versus the Aliens 2, Cave Fox 2001, Line Wars, and another not-yet-named game. And it all started when I found Star Fighters on the *MacAddict* CD. So I would just like to say that you have an excellent magazine, and keep up the excellent work. We sure will.

—Matthew Beedle

Heeere's Maxie

On a morbid note, on page 94 of the October 1997 issue of *MacAddict,* the Hot Tip starts out with "Yo ho ho and a bottle of redrum." I noticed that "redrum" spelled backwards is "murder." Considering what alcohol does to you, that sounds accurate. Or is it a subliminal message? Does it reflect a darker side of Max?

Also—I've been meaning to write you about this, call me a procrastinator—how *dare* you "Unlock Bryce's Hidden Secrets" (April/97, p48)?

—Bryce "Weep-a-lo" Taenzer

Yes

Don't you guys think I'm strange?

—Nick Hance

You're Welcome, Bran4don

I was initially elated to see my letter published in my favorite mag, but my emotions quickly changed when I saw that you spelled my name Brando instead of Brandon. My immediate response was to sue for slander and for the defacing of private property; however, as I was dialing my lawyer, an epiphany hit me. I should be thanking you. You could have defaced my name (changing it to Bran4don) as you did that poor old Ch4ris guy's, and made me and my reputation the object of public humiliation. Thank you.

—Brandon Gatz

Or You Could Hire a Scribe

C'mon, guys, get serious. This is the second review I've read that essentially says, "Microsoft Word 98 is so much better than Word 6, it must be phenomenal!" So it's very good—lots of bells and whistles. However, it needs 11MB of RAM, 60MB to 70MB of hard disk space, and a 120MHz machine to

run—which excludes all first-generation Power PCs. And the cost—a mere $200 to upgrade? For a guy like me who has successfully avoided buying big-bucks applications, it would mean an outlay of $400. For a word processor? For $400 I can add a whole barrel of RAM. For $400 I can get a couple of scanners, a new ink-jet printer, or four copies of Claris Works.

—Bill Eppick

Talk to Our Lawyers

I hope you have good liability insurance, because otherwise *MacAddict* is finished. You see, I checked my mail on the way to my finals. Big mistake. There was your PowerBook G3 issue, with the sexiest 'Book ever on the cover. I'll read it in the exam room! I drove so fast you wouldn't believe it. But my professor wouldn't hear of it. I had to go through a whole three hours of having the unopened *MacAddict* by my side. I know—I'll read it as I drive home! For once, all the lights had to be green. Well, people read on the freeway, I can read in the city. Check out those curves! Stupid kids, out of my way! Look at those ports! S-video! Oh no! Crash! Stupid car could have got out of my way. Oh well, more time to read. That screen really is gorgeous. Insurance? The cops don't seem pleased that I don't have insurance. Cuffs? You'll pay for this, *MacAddict.* Don't think you won't pay!

—Gaggan Boparai

Ask Your Therapist

I have a confession. I work for an auto dealer, and our stock arrives on a local freight truck. It always seems to have a load of the new G3s on it, headed for one of our local schools. Well, I've been trying to bribe and trick the driver so I can get that load of computer. Don't get me wrong. I'm not looking to sell them. I just want to snuggle with them, turn them on, play with them. Is that so wrong?

—Eric Schwarzkopf

Sing It, Brother

In the June issue of *MacAddict,* Brice Rolston wrote, "Cheryl, what have you done? Now I don't get to admire your cute little face every time my precious 'zine comes." In response, here's a thought: Look at your old issues. Geez, this new guy comes and everybody starts talking about how much more they love Cheryl right away. How do you think he feels? He has feelings, too. (You do, right, Mr. New Guy?) Besides, everybody's supposed to like people named Dave. (Your name *is* Dave, right?) So come on, folks, up with the New Guy!

—Daniel Hamilton

STEP UP TO HARDWARE

Windows® Compatibility



Virtual PC,™ SoftWindows®, or Apple®/Reply Card Upgrade to OrangePC:

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Windows® Compatibility Card

Our new OrangePC 620 is the best priced Macintosh Windows® 95/98 compatibility card in history. Virtual PC™ and SoftWindows® users can upgrade to OrangePC for only $399, experiencing a giant step up in performance. In fact, the OrangePC benchmarks** four to twenty times faster than sleepy software emulators.

The OrangePC 620 answers the "price/performance" question by offering true hardware speed at a breakthrough price that every Mac user can afford! It actually has a Pentium® compatible 200MHz processor (user upgradeable to 300MHz) with 16MB of real RAM (user upgradeable to 128MB) on board. This means you can run any PC application on your Mac as fast as a real PC with the ultimate in compatibility.

And the OrangePC's Version 3 software has significant improvements as well. It sports 32-bit drivers facilitating CD-ROM long file names and NDIS3 networking. Our exclusive SnapShot℠ feature allows a Windows screen to show the Mac environment inside a Win 95 window and, conversely, the Mac screen to display the Windows environment. It's like a "picture in picture" on your TV!

◆◆◆◆ MacWEEK

MacWeek Magazine May 1998

So take a step in the right direction - upgrade your software emulator to real hardware for only $399, or buy the OrangePC outright for $499. *Introductory offer expires 7/31/98

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get info

Everything you need to know, plus 100 percent of your RDA of fiber.

AltiVec, Vidi, Vici

New chip technology better than MMX, Olestra

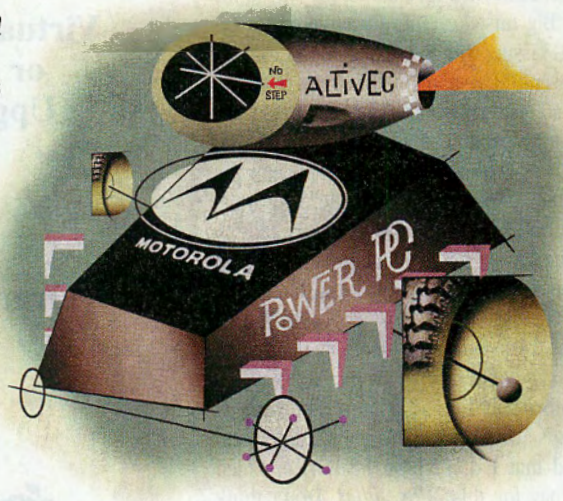


Illustration by Bill Schwartz

Sure, it sounds like MMX, but it goes so much deeper: Motorola has announced plans to add a new execution module to upcoming PowerPC chips. This new module, called AltiVec, will speed up future PowerPC chips by crunching certain kinds of data structures. Like MMX, AltiVec will accelerate processes involving images, video, and speech processing; unlike MMX, AltiVec can also quicken other data-processing functions such as those used in Internet routers and IP telephony gateways.

It works like this: Most microprocessors these days have two execution units—an integer unit and a floating-point unit. (It was the lack of an FPU that crippled some Mac models—namely those with a 68LC040 processor.) AltiVec adds a third execution unit—called a vector unit—to the PowerPC chip. This vector unit will be dedicated to processing certain types of information, giving a speed boost of 2 to 30 times for certain operations.

A couple of factors make the AltiVec technology scream. First, the vector-execution unit can perform up to 16 operations per clock cycle, and it can apply a single instruction to several different chunks of data, which essentially means that AltiVec chips can do several things at once. Also, the vector execution unit has a 128-bit data path that allows the chip to sling data around inside itself at amazing speeds. (Data access to and from the chip is still limited to 32-bit widths). AltiVec will be great at doing data translation, such as converting an MPEG-2 stream from a DVD player into a form that a display can use. Such conversions should see up to a 30-fold speed increase.

All of this speed doesn't come for free, though. Developers will have to rewrite their applications to take advantage of an AltiVec-enabled chip. This isn't as bad as it sounds, however. First, when Apple rewrites parts of the Mac OS to take advantage of AltiVec, applications that use those parts of the Mac OS should get acceleration automatically. For example, if an application uses QuickTime, and QuickTime has been updated for AltiVec, that application should get a boost without a rewrite. Metrowerks has also pledged to include AltiVec instructions in its compilers, which means that it may take just a recompile by developers to produce an AltiVec-aware application.

Before you get your shorts in a bunch waiting for these new chips, relax: AltiVec-enabled processors won't make it to the Macintosh until sometime in the first half of 1999. At the Worldwide Developer Conference in May, Apple announced that it will include AltiVec-enabled PowerPC chips in future Macs.—*DR*

AltiVec @ a Glance

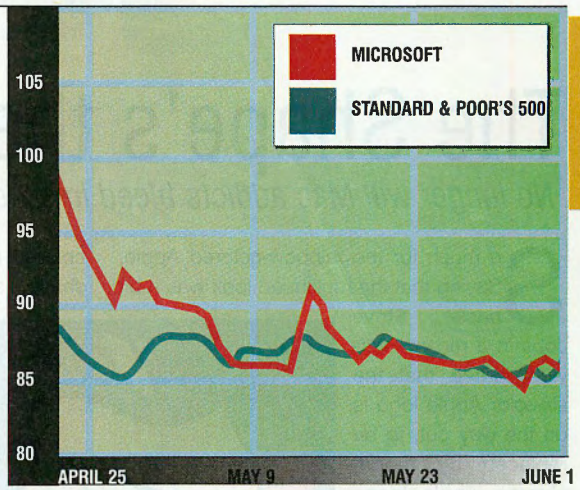
- **Speeds up data-intensive operations by up to 30 times**
- **162 new instructions**
- **Uses new copper-based production technology**
- **Vector unit has 32 registers, each 128 bits wide**
- **Available in first half of 1999**

INTEL'S NEXT STEP

Due to some very hard work by talented engineers—and some mighty impressive cooling technology—Intel will have its own answer to AltiVec. Code-named Katmai, the new Intel chip should be faster when it comes to certain multimedia functions such as video, 3D graphics, and speech recognition. As was the case with MMX, developers must support the 70 new processor instructions present in Katmai to get the speed boost. The chip, which will run at around 500MHz, is due out during the first half of 1999—about the same time the first AltiVec-based PowerPC chips should hit the market.—*DR*

Microsoft Deathwatch

Prospects dim for beleaguered software maker



The following tidbits have been culled from actual recent news stories about Microsoft, and they have been given that special *MacAddict* spin. One might almost think from reading the following that Microsoft is headed for some serious trouble down the line.

- Computer makers are defecting: In a stunning blow to Microsoft's Internet-domination strategy, both NEC and Gateway are preconfiguring PCs with Netscape Communicator instead of Microsoft Internet Explorer. These companies join ranks with Hewlett-Packard, Sony, and Fujitsu.
- Windows 98 sales are expected to be disappointing: A recent study from International Data Corporation says that sales of Windows 98, when it is released, may lag by as much as 35 percent.
- In the ongoing saga of antitrust litigation, Microsoft is currently under fire from the U.S. Department of Justice and the attorneys general of 20 states for anticompetitive practices. U.S. district judge Thomas Penfield Jackson handed down a trial date of September 8 for antitrust litigation, which is coming much faster than the wretched software giant would have preferred. Microsoft dodged a potentially fatal bullet in this ruling when the government chose not to seek to block Windows 98 sales during that time.
- In a delay of Microsoft's flagship products, Office 98—its premier business software—shipped first for the rival Macintosh platform, with the Windows version still in development. This is a surprise, considering that Microsoft develops both versions. Some analysts claim this delay points to a reluctance to support the Windows platform with vital software titles.
- Microsoft suffered a 15 percent drop in stock price: After peaking at nearly 100 in late April, the troubled company is trading at around 85 per share. The Standard & Poor's 500 has outperformed Microsoft stock over the last three months.

With news stories like this, it's a wonder Microsoft still enjoys a warm spot in the hearts of computer users. Oh, wait—I'm sorry. I was thinking of Apple.—*DR*

Icon Garden Put Out to Pasture

Long the destination for camera-toting Apple pilgrims, the famed icon lawn featured fiberglass representations of the original Macintosh icons—including Clarus the Dogcow. But that's all changed. In an effort to update the company's image, Apple has removed the icons from the lawn, leaving nothing but yellow grass where these monuments to the greatest user-interface revolution once stood. No one knows what will spring up in their place, but it's almost certain something will. As part of its deal with the city of Cupertino, Apple has agreed to a public display of art in that space—in which role the icon garden served until recently. Here's our photo salute to the dear departed icon garden. For your own Web-based tour, go to http://icongarden.jory.org. It includes several photos and a QuickTime VR panorama. It's better than being there, because—well, at least there are *icons* in the VR panorama.—*DR*



Clarus used to graze on fresh Kentucky bluegrass while safe between the pencil and the paint bucket (the green icon edge-on in this image).



Although no one knows the fate of the icons on the Caffé Macs sign, it should be noted that a new chef was hired.



Perhaps when Jobs saw that the hands on this watch were not moving, he decided it was time to reboot.

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Now you can rub in your Mac partisanship. With our parent company's newest Web-based email service, you can use one of our custom pro-Mac domain names for your very own free email account. (You can also choose domain names related to some of Imagine Media's other outlets—*Business 2.0*, *boot*, or Imagine Radio—but why would you do that when you can have a *MacAddict* email address?)

Show your true Mac colors—all six, of course—by choosing from the following domain names:

- **buyamac.com**
- **longlivethemac.com**
- **loveamac.com**
- **mac-addict.com**

If you prefer, you can choose from other mail domain names, including the following:

- **divefreak.com**
- **hosedown.com**
- **pleasedontspamme.com**
- **yourbidding.com**

Signing up for your Imagine email account costs nothing. All you have to do is go to http://www.imaginemail.com. The account is Web based, which means you can check it from any computer with access to the Web—convenient for those who change jobs often or are leaving school and want a permanent email address. Imagine Mail also comes with an address book, the ability to send certain kinds of attachments, a vacation reply, email signatures, address blocking, and the ability to check other POP-based email accounts.

So what's the catch? There are a couple. First, the service needs to set cookies on your Mac to work properly, so if you have cookies disabled, you may not be able to use an Imagine mail account. Second, the service is entirely supported by advertising, so you'll see an ad in a browser frame while you access your email. Third, you'll also need a JavaScript-capable browser for the frames version. A nonframes version is available, which you can use if you live behind a firewall.—*DR*

get info

The Shape's the Thing

No longer will Mac addicts bleed in six colors

So much for the rainbow-colored Apple. Saying that the multihued look was a bit passé, Steve Jobs in a recent interview hinted that the six-color Apple logo is on the way out, to be replaced by monochrome Apple logos bearing the same shape.

Apple spokeswoman Rona Hamilton confirmed that the company is moving away from its six-colored past. "We're trying to focus on the shape," she said. "That's what we think is the identifying item."



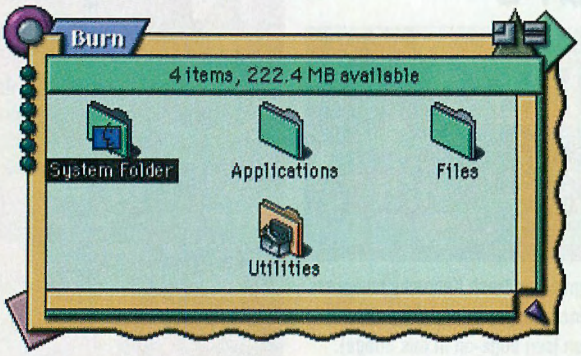
Illustration by Lloyd Dangle

A monochrome mark isn't necessarily a new thing for Apple. Depending on the situation, the logo has previously been rendered in solid black, red, or white. On new products, we'll see more of the same type of treatment we've seen on the new PowerBook G3 line, with its two-inch ice-white crystal logo, or on the iMac, with its similarly styled Bondi Blue logo.—*DR*

Kaleidoscope 2.0

The world's favorite window hack goes public beta

Oh sure, we promised this to you a couple of months ago, but due to circumstances beyond our control (and a bout of intense weekend therapy), we've been unable to get our K2 preview out—until now. On May 28, the good folks who make Kaleidoscope released a public beta of the amazing Kaleidoscope 2.0.



CHECK OUT THE IRREGULAR window shape. This isn't an easy trick to pull off, but Kaleidoscope does it with grace—and all of the controls even work properly!

What's New in K2

- New control panel with new options
- New windowing engine that allows for features such as irregular window shapes
- Menus that look much better and are more detailed
- Patches to the Appearance Manager for more complete conversion
- Tons of other improvements



Under Kaleidoscope 2.0, menus are significantly enhanced. The new backgrounds and dividers show up, and the menu background virtual-memory bug has been fixed!

Kaleidoscope 2.0 is available at http://www.kaleidoscope.net, where you'll also find lots of Kaleidoscope 2.0–compatible schemes. For those of you who use Kaleidoscope already, version 2.0 can use schemes made for Kaleidoscope 1.x. Oh, and be sure to spend the $20 to register your copy after you download it.—*DR*



Pop-up window tabs have been reshaped to match other Kaleidoscope elements. Tabs can now have irregular shapes, just like other kinds of windows.

The MacAddict Index

Average number of users logged on to AOL at 9 p.m. each Friday during February 1998: 600,000

Average number of viewers tuned into MTV at 9 p.m. each Friday during February 1998: 500,000

Number of Mac OS 8 packages sold as of May 1998: 2.2 million

Estimated Mac OS 8 installed base as of May 1998: 3.5 million

Rank of QuickTime among the most widely owned Windows software products, according to Media Metrix: 8

Total amount Umax expects to lose on its SuperMac clone program: $33 to $36 million

Amount Motorola wrote off in terminating its StarMax clone program: $95 million

FOCUS ON: AMBULANCE CHASING!

Amount for which thwarted Mac clone maker Panorama Designs is suing Motorola: $13.5 million

Total amount for which defunct clone maker PowerTools is suing Apple and UMAX: $350 million

Amount for which defunct chip maker Exponential Technologies is suing Apple: $500 million

Amount for which patent huckster Imatec is suing Apple: $1.1 billion

FOCUS ON: POWERBOOKS IN EXTREMIS!

Maximum number of months for which a PowerBook battery can be left in storage and still be rechargeable: 12

Minimum operating temperature for a PowerBook: 10°C

Maximum operating altitude for a PowerBook: 10,000 feet

Minimum recommended clearance between PowerBook keyboard and display (if on): 1 inch

Sources may be found at the *MacAddict* Web site.—*MS*

Ever Wish You Could Get Back a Project You Lost? You Can.

Aladdin FlashBack™ gives you instant access to all your previous versions.

FlashBack your work and you're protected.
Protected against loss by accidental deletion, file corruption, *even from hitting the save key and overwriting your file.* Aladdin FlashBack is a whole new way to protect your files.

With FlashBack you can recover not only lost or damaged files, but even previous versions of files that you changed, even if you made the changes months ago.

Unlimited undos
Discover the power and time savings of unlimited undos. FlashBack tracks changes made to a file every time you hit Save. Recover from changes even after you've quit your application, turned your computer off and gone home. If you ever saved a FlashBacked file, you can recover it exactly as it was at that time.

Works on any file
If your application saves files, FlashBack will protect you. From word processors to graphics programs, from databases to spreadsheets, from HTML to C++.

Instant file recovery
Restore any file you've protected just by double clicking. No confusing procedures, no complex operations. It doesn't get any faster or easier. Plus, FlashBack works equally well with both local and networked files.



Save Disk Space
Keep multiple versions of your important files without gobbling up disk space. FlashBack makes only one complete copy of your file. Previous versions are tracked through tiny "diff" files containing only the changes, or differences, between one version and the next. The result? You can save five, ten, twenty or more versions of a file in less room than you would use hitting 'Save as' just a couple of times!

Time & Date Stamping
FlashBack time and date stamps each version it saves, making it the organized alternative to cluttering up your folders with cryptically named 'Save as' files!

It's a new level of protection. Beyond backup. Beyond file recovery. FlashBack gives you a whole new way to protect your files and save your sanity.

Aladdin Systems

(800) 732-8881 www.aladdinsys.com

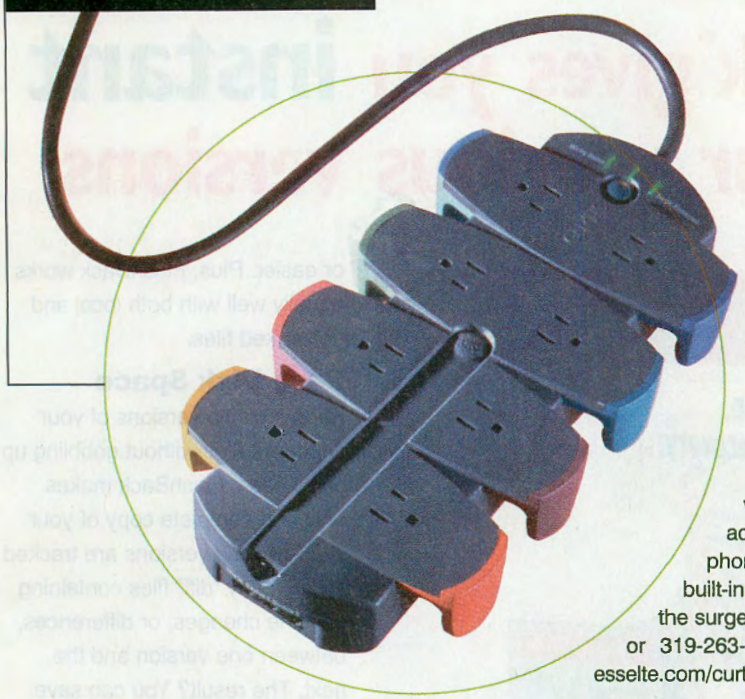
© 1998 Aladdin Systems, Inc. All trademarks are property of their respective owners.

cravings

Five fabulous finds that defy cents and bring you to a fiery boil

SP9000 Series Surge Protector

Curtis Computer Products

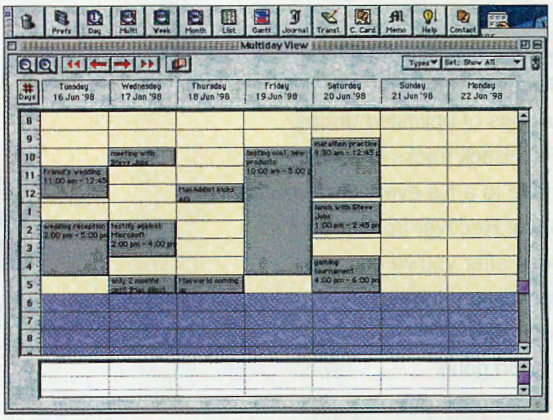


It was a dark and stormy night. I was alone in the house, and there was nothing to do. Hoping to find something entertaining, I turned on my Mac. There it was—my Web browser! I started surfing the Web, hitting all my bookmarks, when suddenly the lightning struck! And struck! And struck again! The lights in the house flickered off and on. My Mac! Saved by a surge protector—the SP9200 from Curtis. All surge protectors in the 9000 series possess diagnostics such as a surge indicator light, a wiring status light, and an alarm that warns you when the electric surge is too hot to handle—that's over 1,350 Joules. The wiring status light will even tell you if a wall outlet is miswired or potentially dangerous. There are three models in the 9000 series: SP9200T ($54.99) for personal computers, and SP9500N ($64.99) and SP9700M ($74.99) for networks. These three models each have eight outlets; accommodate power adapters; boast advanced telephone-line protection via Sidactor Technology; and offer a built-in cable manager, which lets you put all those cables into the surge protector according to color codes. Call 800-272-2366 or 319-263-8144 for more information, or visit http://catalog.esselte.com/curtis.—*JH*

SURFING—NOT SURGING—ON THE WEB.

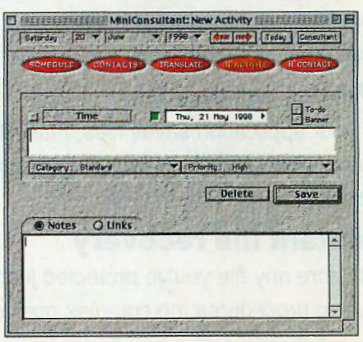
Consultant 2

Chronos



If you think personal information managers are useless, well, you're probably right. Who wants to be organized and efficient? Disorganization brings spontaneity into our lives. But if you want to organize your life and look stylish, get Consultant 2. This full-featured, Mac-only PIM organizes schedules, contacts, and communication. It also allows you to view information according to day, multiday, week, month, year, list, Gantt chart, journal, and memo views. We especially love a couple of outstanding features: The appearance-savvy GUI allows you to select different textures including wood, parchment, brick, shimmer, and so on—think customization. And a smart feature understands and interprets what you type. For example, if you type, "Meet Steve Jobs tomorrow at noon regarding proposal," Consultant schedules the appointment and links his contact information. Drawing on Apple's speech technology, Consultant can read your schedule to you. You can also launch your email client or Web browser directly from the PIM, and in the office you can share Consultant data files over a network. Finally, Consultant offers a built-in word processor that generates reports, mail merges, envelopes, faxes, and labels, as well as a MiniConsultant utility that allows you to schedule appointments and access contacts quickly in one window. Call 801-550-9337 for more information, or download Consultant from http://www.chronosnet.com. Online registration costs $39.95.—*JH*

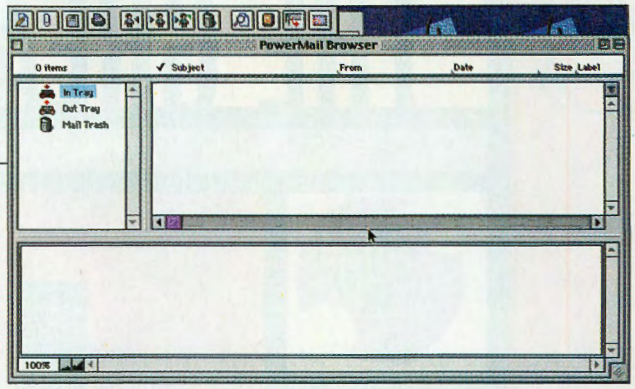
ORGANIZE YOURSELF AND LOOK GOOD.



FIND A DEMO of Consultant on The Disc.

PowerMail 2.0

CTM Development



SHAPE ELECTRONS THE RIGHT WAY WITH POWERMAIL.

What do you get when you add a pinch of power to an email client? You get PowerMail 2.0 from CTM Development. Who said no one writes software for the Mac? Moreover, PowerMail isn't just software—its intuitive, easy-to-use interface gels with the Mac GUI for a consistent user experience. PowerMail 2.0 boasts some awesome features: It supports multiple email accounts and POP3 and IMAP4 protocols (the latter allows users to see and manipulate the contents of server-based mailboxes); imports and exports messages from Eudora; boasts quality filters for mail management and automatic archiving; works with Mac OS 8 or later; provides drag-and-drop functionality; and does all this in 71 languages, including Japanese, Arabic, Russian, Hindi, and Nepali. What else? PowerMail sports high-speed archiving and retrieval, thanks to its integration of Apple's Information Access Toolkit (also known as V-Twin). In fact, PowerMail was a runner-up in the category "Best Apple Technology Adoption" at the Apple Design Awards for Macintosh developers. Très cool. PowerMail 2.0 is available for $49. For more information, check out http://www.ctmdev.com, where you can download the application, or call 800-424-9933.—*JH*

PowerMail

SW-1273 Multimedia Speaker System

Kinyo Company



SERIOUS VIBRATIONS AT THE MOLECULAR LEVEL.

The offices are alive with the sound of music! Through this speaker system, Mozart's Divertimento 17 will not only sound allegro, but allegro molto vivace. In addition to Mozart, my favorite electronica thunders through the air-conditioned ether at *MacAddict*. How? The ISO-9002–certified SW-1273 has a subwoofer that blows out 40w RMS through its 6.5-inch-long throw woofer. Also, the system comes with a pair of magnetically shielded satellite speakers that deliver musical waves through 4-inch cone-type drivers and 1.5-inch dome tweeters. That translates into 20w RMS on each side of your Mac. And you can adjust the separate bass, treble, and volume controls, all from your desktop. Rockin'! Your coworkers will hate you, but you'll bask in toe-tapping tunes. If you don't want musically agnostic coworkers to spoil your fun, you can sport your favorite headphones—plug and play! The SW-1273 costs $149 (SRP). Who said the listening experience had to be expensive? For more information, call Kinyo at 626-333-3711, visit http://www.kinyo.com, or scope out your local computer store.—*JH*

DCS 315 Digital Camera

Kodak

DON'T WORRY, BE CAMERA HAPPY.

Strike a pose! This digital camera for imaging professionals is unique. Aimed at corporate and industrial photography, law enforcement, government applications, medical and scientific imaging, professional services, and photojournalism, the DCS 315 provides high-quality digital capture. It has a lightweight Nikon single lens reflex body; features high-performance focusing and metering, as well as variable exposure settings; supports Nikkor AF lenses; and allows the use of multiple interchangeable lenses. That's not all: The DCS 315 cranks out 1.5 megapixel full-frame CCD and does both raw and finished files at three levels of compression (good: 200K, better: 350K, best: 650K). In addition to these elements, Kodak's wunderkind sports an LCD review so you can analyze the shot, features voice annotation so you can record notes for each image, and offers a dual PC Card that allows you to transport images without lugging around the camera. The DCS 315 is available for $5,995 through authorized Kodak Professional camera dealers. Click over to http://www.kodak.com/go/professional or call 800-235-6325 for the details.—*JH*

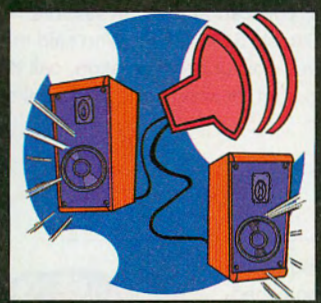


THE GREAT MACADDICT



tip-off

You know you're a Mac addict when you name your baby Max (poor girl), remove all the windows from your house, and write love letters to your sweetheart using AppleScript. Right?



Wrong. In order to qualify as a card-carrying Mac addict, you need to be armed with more than just a collection of clever phrases and cute puns. You've got to know the Mac cold, cruise the Finder like a locked missile, tweak your software until it screams, and keep your hardware humming smoothly.

No longer so certain of your Mac addict status? We'll show you how to coax the most from your Mac with top-notch tips culled from our first ever *MacAddict Tip-Off*. As a service to you, our readers, we pulled together a group of seasoned Mac pros, gave them a case of Mountain Dew and a crisp fiver (each!), and challenged them to reveal their secrets. What they came up with was a fully loaded arsenal of more than 250 tricks, pointers, and handy how-to's on everything from graphics to games.

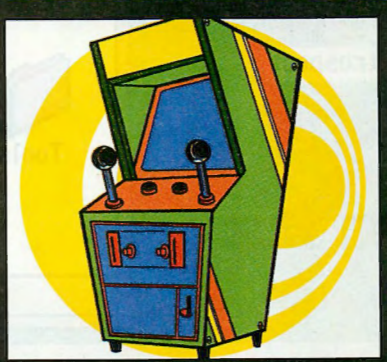
So, you can either continue to just dream in six colors, or you can take our advice and make the most of your waking hours. We know what a real Mac addict would do.

tip-off





illustrations by Mike Gorman





by Mean Joe Holmes
Dave "The Edge" Reynolds
Sweet Sandee Cohen
Terrible Tim Tully
The Prison Dude
T. Killer Boylan



YOU'LL FIND DEMOS and a slew of shareware mentioned in this article on The Disc. We Promise.

KEYBOARD TRICKS

TIP-OFF

MASTERING THE MOUSE-FREE FINDER

If it's speed you're after, quit mousing around your Finder and let your fingers do the walking. We double-dog dare you to run your Mac all day *without touching the mouse*. Sure, it's a snap in an application like Microsoft Word, where you can perform every action—even menu selections—from the keyboard. But by making use of little-known key combinations, you can actually do a serious amount of work in the Finder, too, without ever lifting a finger...off the keys, that is. So lose the mouse, limber up your digits, and show that Finder exactly who's boss.

PRACTICE MAKES PERFECT

Now that you've got down the moves, it's time to put them to the test. These are great sets of keyboard command combinations that will be sure to speed up your work. Remember, you can often type these really fast in succession—bang, bang, bang—without waiting for the actions to catch up with you.

■ SELECT AN INACTIVE OPEN WINDOW OR BRING A HIDDEN WINDOW TO THE FRONT:

Command-Shift-up arrow (selects the desktop, if the icon is on the desktop)

■ TRASH EVERY FILE IN AN OPEN FOLDER:

1. Command-A (selects all)
2. Command-Delete (moves to Trash)

■ CHANGE THE RAM ALLOCATION FOR A SELECTED APPLICATION:

1. Command-I (does a Get Info)
2. Tab, Tab (selects Preferred Size text box)
3. Type the new RAM partition.
4. Command-W (closes Get Info window)
5. Command-O or Command-down arrow (launches app)

■ RETRIEVE FILES FROM THE TRASH:

1. Command-Shift-up arrow (selects desktop)
2. Type *tra* (selects Trash).

SLEEP, RESTART, SHUT DOWN

■ Press

⌥ + ⌘ + S for sleep,

⌥ + ⌘ + R for restart,

⌥ + ⌘ + return for shut down

(⌥ + ⌘ + . for cancel).

SELECTING

■ Select icons on the desktop or in an active window:

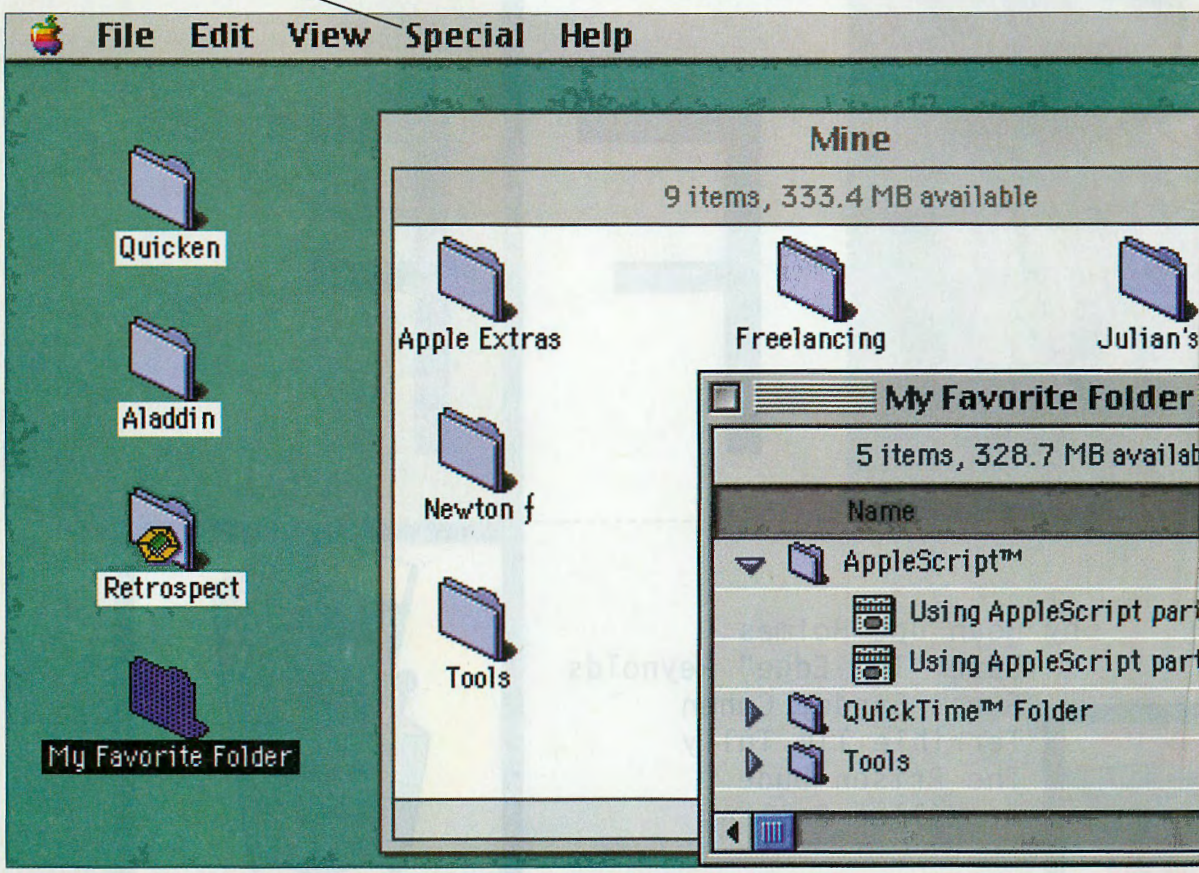
Type the first few letters of an icon name to select that specific icon—for example, *Qui* for Quicken.

Or...

tab to move from icon to icon alphabetically

(shift + tab to move backward).

This will select any visible icon in expanded folder lists.



SPILLED A STICKY SODA ON YOUR KEYBOARD? NEVER FEAR! JUST PRESS COMMAND-OPTION-R-C TO CLEANSE THE COLA FROM YOUR KEYS.

3. Command-O or Command-down arrow (opens Trash window)
4. Type the first few letters of the file name (selects the file).
5. Command-Y (puts away)
6. Command-W (closes Trash)

■ EJECT A REMOVABLE DISK:

1. Command-Shift-up arrow (selects desktop)
2. Type the first few letters of the disk's icon name (selects the disk).
3. Command-E (ejects the disk)

■ COPY THE NAMES OF ALL THE ICONS IN A WINDOW OR ON THE DESKTOP:

1. Command-A (selects all)
2. Command-C (copies all)

■ LAUNCH AN APPLICATION THAT'S LOCATED SEVERAL FOLDERS DEEP:

1. Command-Shift-up arrow (selects desktop)
2. Type the first few letters of the hard drive's name and press Command-O to open your hard drive window.
3. Select the folder by typing the first few letters of its name.
4. Press Command-Option-O to open the folder and close the hard drive window.
5. Select the next folder by typing the first few letters in its name. Then press Command-Option-O to open the folder and close the parent folder window.
6. When you reach the file, select it by typing the first few letters, then press Command-Option-O to launch the application and close the folder window.

■ ALTERNATIVE METHOD TO LAUNCH AN APP THAT IS SEVERAL FOLDERS DEEP:

1. Press Command-F to open Find.
2. Type unique letters in the application's name and press Return.
3. Select the file in the upper panel using the arrow keys.
4. Press Command-Shift-O to open the file.

OPEN, CLOSE, LAUNCH

■ Open or launch a selected icon:

⌘ + O (⌘ + option + O also closes the parent window).

Or...

⌘ + ↓ (⌘ + option + ↓ also closes the parent window).

■ Open the parent icon:

⌘ + ↑ (⌘ + option + ↑ also closes the child window).

■ Close the window:

⌘ + W (⌘ + option + W closes all open windows).

■ In the Folder List view, expand the selected subfolder:

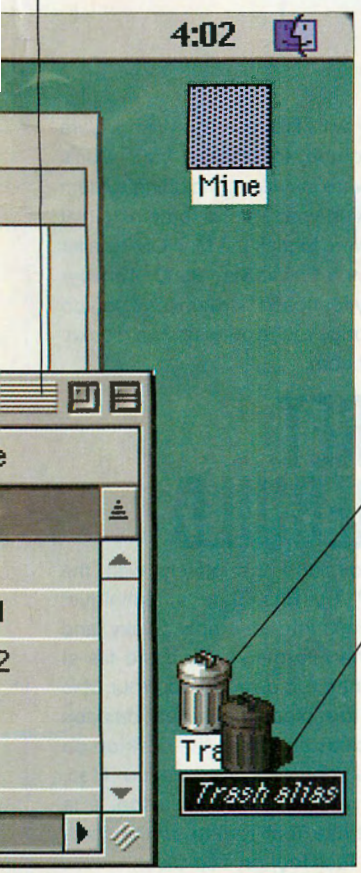
⌘ + shift + → (⌘ + option + shift + → expands all the folders).

Or...

→ ← ↓ ↑ to move to the next icon in any given direction.

■ Deselect the active window and select the desktop:

⌘ + shift + ↑



WORKING

■ Put the selected icon in the Trash:

⌘ + delete

■ Put the selected file back in the original folder:

⌘ + Y

■ Make an alias:

⌘ + M

■ Show the original of the selected alias:

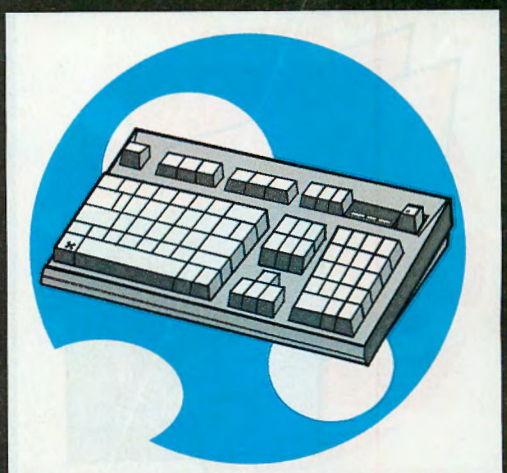
⌘ + R

■ Eject and unmount a selected volume:

⌘ + E

■ Change a selected icon's name:

return, Type the new icon name, return



tip-off

TIP-OFF

MEMORY

■ DISK CACHE: Under Mac OS 7.x, set your disk cache to the lowest possible setting to save RAM. Setting it higher doesn't help your Mac's speed much.

■ DISK CACHE: Under Mac OS 8, set your disk cache to 32K for each megabyte of memory you have. Although you lose some available RAM to the disk cache, the Finder will speed up quite a bit as a result.

■ VIRTUAL MEMORY: Under Mac OS 7.x, turn off virtual memory unless you really need the RAM. Your Mac will be more stable and will run faster.

■ VIRTUAL MEMORY: Under Mac OS 8.x, turn on virtual memory. Your applications will take less RAM, they'll launch faster, and your system will be more reliable.

EXTENSIONS

■ KEEP ONLY WHAT YOU NEED: Although it's tempting to download and use every single possible extension that ever existed, resist this urge, as it is the fastest road to hell. Instead, choose your extensions wisely. Otherwise you'll run out of RAM and suffer intense extension conflicts—and your little toes will probably fall off, too.

■ ADD EXTENSIONS ONE AT A TIME: Don't just dump the 30-item "Uncle Bill's Deep-Fried Extension Pack" into your System Folder all at once. Drop each greasy morsel in one at a time, restart, and see if there are any problems. If not, drop the next one in, and so on.

■ INVEST IN EXTENSION SOFTWARE: Although the Extensions manager that ships with the Mac OS is good, it doesn't do everything. Our favorite is Casady & Greene's Conflict Catcher 4.1.1. It not only handles extensions, it checks for conflicts and can be used to manage such items as Photoshop plug-ins and contextual menu items.

MONITORS

■ COLOR DEPTH: Set this to 256 colors (8-bit color) to speed up the Finder, which has to convert everything it draws to 256 colors anyway. Make life easier for your Finder.

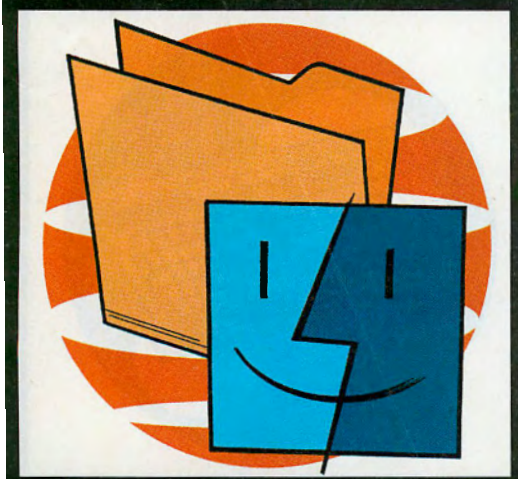
■ DON'T USE A DESKTOP PICTURE: The desktop picture sucks up RAM and processor cycles, so unless you're really stuck on the picture, get rid of it.

FONTS

■ DON'T OVERDO IT: Each font takes up memory, and the Finder (and other applications) have to keep track of each font. Remember, the limit is 128 fonts in your Fonts folder.

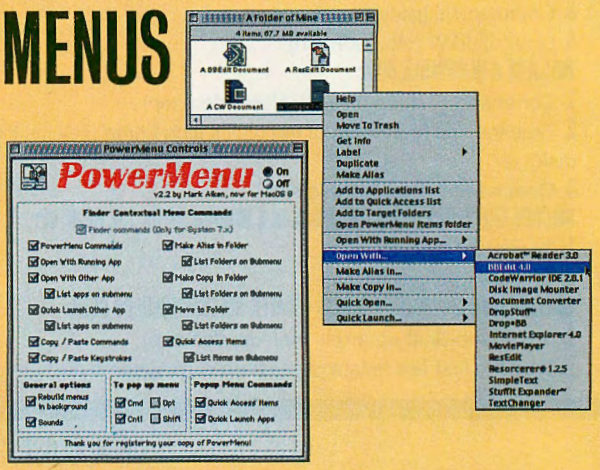
■ CHOOSE OR LOSE: For sanity's sake (and your printer's), pick either PostScript or TrueType versions of your fonts, and stick to that format. Having both types of a font can be confusing.

■ USE A FONT MANAGEMENT UTILITY: ATM and FontReserve come to mind. These utilities allow you to swap fonts in and out on the fly, making sure your type is at hand without getting in the way.

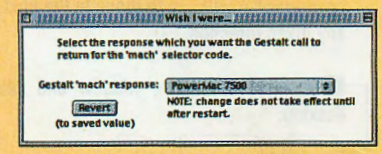


SUPERSPICY TIPS

MENUS



■ Contextual Menus without Mac OS 8—contrary to popular opinion, not everyone has moved to Mac OS 8. For those of you with Mac OS 7.x and a hankering for Contextual Menus, install PowerMenu 2.2.1. It brings some of the power of Contextual Menus to Mac OS 7.x. Find PowerMenu at http://www.kagi.com/authors/marka.



WISH

■ If you really want to play with fire, use the Wish I Were control panel extension combo to change your Mac's gestalt ID. This will fool software installers (including system software installers) into thinking your Mac is something that it's not. You can use Wish I Were to trick the Mac OS installer into believing that your IIci is a Power Mac 9500. *Warning:* We assume no responsibility for hosed hard drives if you do this and something goes wrong. You're on your own, bucko. Find it at http://www.macfixit.com.

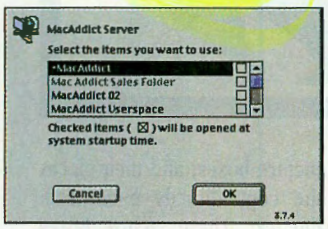
SUPERSECRET DESKTOP REBUILD

■ Want to rebuild your desktop completely with the supersecret Stickies trick? Try Buz Zoller's technique: Open Stickies, type a little text into an empty Sticky, and choose Export Text from the File menu. Save the file at your hard drive's root and name it *desktop db*. Your Mac should ask you if you want to replace the current desktop db. Click Replace. Quit Stickies and trash the desktop db text file at your hard drive's root level. Restart your Mac, and it will do a complete rebuild of your desktop, à la TechTool. Or you could just use TechTool to do the same desktop rebuild (we've put TechTool on The Disc).

COMMAND-CLICK ON THE SECRET SPOT IN THE MEMORY CONTROL PANEL AND, IN THE RESULTING DIALOG BOX, UNCHECK THE OPTION "CRASH AT RANDOM."

NETWORKING

■ SERVERS: When connecting to a file server, don't check the Connect Automatically box. Instead, make aliases to frequently used servers, and double-click



A SERVER worth waiting for.

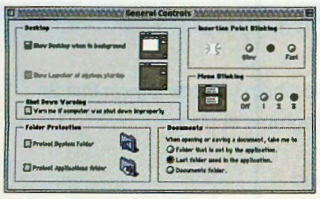
these. That way, your Mac won't clog the network with unnecessary "I'm here" messages.

■ FILE SHARING: Turn off File Sharing unless you need it. When it's on, it takes up CPU time for no reason if there's no one there with whom you're sharing files.

INTERFACE

■ TURN OFF FOLDER SIZE CALCULATION: This one wastes a load of time, especially if you have folders with lots of stuff in them. Turn it off in the View Options dialog box.

■ TURN OFF THE SHUTDOWN WARNING: One of the most annoying things after a crash is for your Mac to tell you that you turned off your Mac incorrectly. Duh. Turn this annoyance off in the General Controls control panel.



STOP THE INSANITY with a check to the box.

■ CLEAN UP YOUR INTERFACE: To hide the Finder automatically, uncheck Show Desktop When In Background in the General Controls control panel. The Finder now hides when it's in the background. Neat!

LEARN THE CLICKS

■ COMMAND-CLICK: Do this on the name in a window's title bar while in the Finder, and you'll get a listing of where the window's folder is on your hard drive.

■ OPTION-DRAG: This makes the Finder copy the item that you're Option-dragging. It can also be used to move the Control Strip tab around—even to the opposite side of the screen, where it belongs.

■ COMMAND-DRAG: Use this to move the tabs on tabbed windows. Put a little space between your tabs for an attractive desktop layout.

PERFORMANCE AND MAINTENANCE

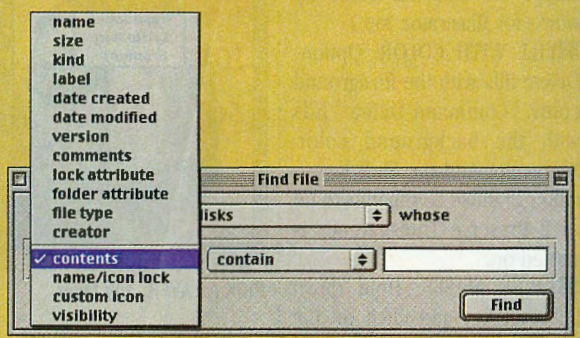
■ REBUILD YOUR DESKTOP: We often forget to do this little task, but it is an important part of any maintenance routine. Hold down the Command and Option keys while the Finder is starting up, and you will be asked if you want to rebuild the desktop. Go ahead and do it, but remember to start up with extensions off for the best rebuild.

■ SET A START-UP DISK: If your Mac doesn't have a start-up disk specified in its Startup Disk control panel, it takes some time at startup to figure out which disk to use. Give your Mac some direction by selecting a disk for it.

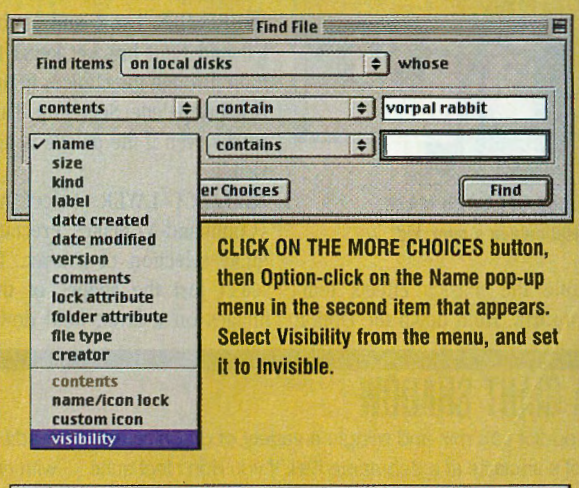
■ DEFRAGMENT YOUR HARD DRIVE: For the fastest possible performance, either use a commercial utility to defragment, or copy the drive to a spare and then copy the data back to the original drive.

HOW TO FIND A WORD IN AN INVISIBLE FILE

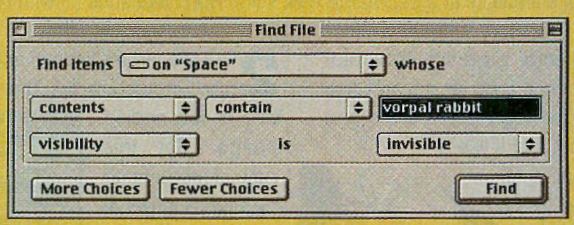
So you say this isn't useful, huh? Well, what if you once made a file invisible (to hide it from certain prying eyes) and you want to find it, but you can't remember what you called it or where it is? All you remember is that the words *vorpal rabbit* are somewhere in the file. What do you do? Why, take advantage of Find File's secret features, of course. Here's how:



START FIND FILE with Command-F. Hold down the Option key and click on the Name pop-up menu. You'll see four new menu options at the bottom of the menu. Select Contents.



CLICK ON THE MORE CHOICES button, then Option-click on the Name pop-up menu in the second item that appears. Select Visibility from the menu, and set it to Invisible.



SINCE YOU REMEMBER which hard drive contains the invisible file, select that drive in the Find Items pop-up menu. Finding things by content takes a *long* time, so do anything you can to narrow the search and speed things up. Press Find—you're off!

GRAPHICS



PHOTOSHOP 4 OR 5

■DRAG FROM ILLUSTRATOR OR FREEHAND: Drag artwork from Illustrator or FreeHand directly into Photoshop and it comes in on its own layer. Hold down the Shift key and the art comes in centered on its own layer. Hold down the Command key and it comes in as a path.

■HIDE PALETTES: Press the Tab key to hide all palettes. Press Shift-Tab to hide all palettes except the Toolbox. (This tip works for Illustrator, too.)

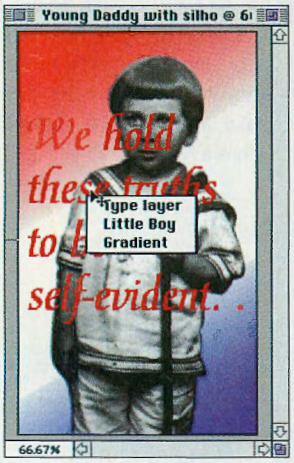
■FILL WITH COLOR: Option-Delete fills with the foreground color. Command-Delete fills with the background color. Secret tip: Add the Shift key to either of those commands to fill as if Preserve Transparency is turned on.

■LAYER MASKS: Hold down the Shift key and click on the preview of a layer mask to disable the mask's effects temporarily. Hold down the Option key and click on the preview of a layer mask to see and work on the mask.



TAKE OFF YOUR MASK. Halloween's over, kid.

■TARGET LAYERS: In the Move tool, hold down the Control key and click with the mouse. A contextual menu appears with the names of the layers in the document. Choose the layer you want to go to. Secret tip: Add the Option key and you can click on the artwork to get the target layer.



PICK A LAYER, any layer.

■BRUSHES: Use [and] (the left and right bracket keys) to loop through the choices in the Brushes palette. Secret tip: This works even if the palette is not visible.

■SELECT LAYER: Select All (Command-A) makes a rectangular selection of a layer. To select just the shapes of the images on a layer, hold down the Command key and click the name of a layer. Secret tip: Command-click the name of a channel to make it a selection. Command-click the name of a path to make it a selection. Command-click the name of a layer mask to make it a selection.

QUARKXPRESS 4

■CONVERT TEXT: QuarkXPress 4 allows you to convert text into picture boxes. Select the text and choose Style, then Text To Box. Similar to Create Outlines or Convert To Paths in vector programs, this action copies the text, converts it to picture boxes, and then places the copy directly underneath the text. These picture boxes are not part of the original text. Secret tip: Hold down the Option key as you choose Text To Box. This deletes the original text and pastes the converted text as an inline graphic. These picture boxes will then flow with the text.



THESE JELLY BEANS are pretty as a picture box.

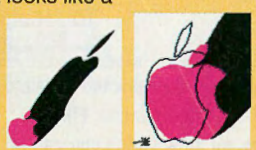
■STICKY APPLY: Hold down the Option key as you click the Apply button. This turns the button into a Sticky Apply that will keep applying automatically. The Sticky Apply continues to work across all dialog boxes for the rest of the Quark session. Hold down the Option key again to unstick the button.

■ARROWS INTO PICTURES: QuarkXPress 4 allows you to convert lines into picture boxes. For example, draw a thick line and add an arrow to it. Choose Item, then Shape, fol-

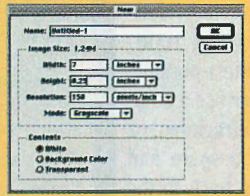
HOW TO CAST A GIANT SHADOW

A picture-perfect Mac addict can mix and mingle a variety of graphics programs with the grace of a socialite at a debutante ball. If you don't feel quite ready to celebrate your artistic coming out, we'll help you refine your image with an all-purpose how-to that uses three programs at once.

1 Starting in your vector program (Illustrator or FreeHand), open a logo or convert text into paths. Duplicate the logo. Then scale and skew the duplicate so it looks like a large shadow. (If you are in FreeHand, use the 3D Rotation tool to give the logo perspective.)



2 Cut the large shadow, and then open a new Photoshop file. The file will be the size of the copied image. Set this new document to be slightly larger at a resolution of 150 pixels per inch in gray-scale mode.



3 Paste the copied image as a set of pixels on its own layer. Set that layer to preserve transparency, and then apply a black-and-white gradient across the image.



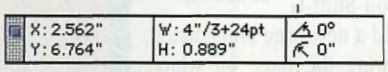
DON'T POINT WITH YOUR KNIFE TOOL. IT'S RUDE.



THE SHORTEST WAY to a picture box is not a straight line.

lowed by the Bézier icon. This converts the line to a shape. Then choose Item, Content, and Picture. You can now import pictures into this picture box.

■DO THE MATH: You can manipulate any number in the measurements palette or in any dialog box by doing math. So if



QUARK 4.0 DOES THE MATH so you don't have to.

you want to make a 4-inch dialog box one-third its width, just make the width field read *4"/3* and press Return. You can even mix math: To make a 4-inch box one-third the size and then add 24 points, you would enter the equation *4"/3+24pt* and press Return.

■INCREASE LINE WEIGHT: Command-Option-Shift-> (greater-than sign) increases the stroke weight of a line. Command-Option-Shift-< (less-than sign) decreases it.

PRINTING

■AVOID EXTRA CHARACTERS: Instead of using the space bar to make line spaces, use paragraph formatting. Also, extra paragraph returns add to the file size and processing time.

■TEXT BOXES WITH BACKGROUND NONE: Unless you need Background None for a special effect, keep the background color as 0% Black. It takes more time to process a file with Background None.

■ROTATING AND SCALING PLACED IMAGES: Avoid doing transformations such as rotations and scaling in the page-layout program. Instead, go back to the original problem figure and do the transformation there.

■SAVE AS TIFFS: Do this instead of saving files as EPS with clipping paths—both PageMaker 6.5 and QuarkXPress 4 can read the clipping paths in Photoshop documents saved as TIFF files. This allows you to reduce file size.

■GENERAL STRETCHING EXERCISES: Dragging and dropping between documents usually bypasses the contents of the Clipboard. This is especially important when you're working in Photoshop, where you don't want to waste your time copying and pasting.

■ALIAS: You can force one

CLIP'N'SAVE COMMANDS

If you're a long-term Illustrator user who upgraded to Illustrator 7, the changes for many of the standard keyboard shortcuts may have frustrated you. Or perhaps you completely lost it the first time you went to ungroup and your artwork disappeared. (Check out the changes in Ungroup and Hide.) The following major commands were changed from Illustrator 6 to Illustrator 7.

	ILLUSTRATOR 6	ILLUSTRATOR 7
Actual Size	Command-H	Command-1
Fit In Window	Command-M	Command-0
Zoom In	Command-]	Command-+
Zoom Out	Command-[	Command--
Artwork Mode	Command-E	Command-Y
Preview Selection	Command-Option-Y	Command-Shift-Y
Hide Edges	Command-Shift-H	Command-H
Hide Template	Command-Shift-W	none available
Bring To Front	Command-=	Command-Shift-]
Send To Back	Command--	Command-Shift-[
Ungroup	Command-U	Command-Shift-G
Make Mask	none available	Command-7
Release Mask	none available	Command-Option-7
Release Compound	Command-9	Command-Option-8
Hide	Command-3	Command-U
Show All	Command-4	Command-Shift-U
Hide Unselected	Command-Option-3	Command-Option-U
Lock	Command-1	Command-L
Unlock	Command-2	Command-Shift-L
Lock Unselected	Command-Option-1	Command-Option-L
Average	Command-L	Command-Option-J
Average And Join	Command-Option-J	Command-Option-Shift-J
Release Guides	Command-6	Command-Option-5
Lock Guides	Command-7	Command-Option-;

4 Turn off Preserve Transparency, and then apply a Gaussian Blur to your image. Flatten the file and save it as a TIFF.



5 Save the small logo as an EPS.



6 In your page layout program (QuarkXPress or PageMaker), import the large shadow TIFF, and then place your text in front of it. (In QuarkXPress, set the background color of the textbox to None.) Then import the EPS image. (In QuarkXPress, set that picture box for a background color of None.) Adjust the position of the front logo in relationship to the back shadow, and you're made in the shade.



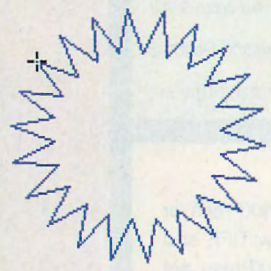
application to open another's files by dragging the file onto an alias of the application. For example, this forces Photoshop to open downloaded Web files, and FreeHand to open Illustrator files.

ILLUSTRATOR 7

■SCROLL WITH THE HAND TOOL: Using the Hand tool is much faster than moving all the way over to the scroll bars. Pressing the spacebar gives you the Hand tool, no matter what tool you're in. However, if you are working in the Text tool, pressing the spacebar will add spaces to your text. In that case, hold down the Command key, add the spacebar, and then release the Command key. This gives you the Hand tool without adding spaces.

■NUDGING PATTERNS: You can move, rotate, scale, reflect, or skew patterns within an object by holding down the tilde (~) key while you move or transform the object. To nudge the pattern in small increments, hold down the tilde key as you press the up, down, left, or right arrow keys.

■STARS, POLYGONS, AND SPIRALS: Click the up or down arrow keys as you draw a star, polygon, or spiral to increase



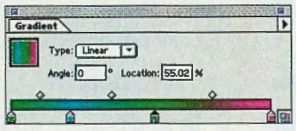
CLICK UP AND DOWN to increase your star power.

or decrease the number of sides or coils.

■LOCK AND HIDE: Command-U hides selected artwork. Command-L locks selected artwork. Secret tip: Command-Option-U hides all the deselected artwork. Command-Option-L locks all the deselected artwork.

■SELECT ALL IN A LAYER: Option-click the name of a layer to select all the objects in just that layer. Secret tip: Option-Shift-click to add all the objects in another layer to the current selection.

■GRADIENTS: Hold down the Option key as you drag a gradient color slider to duplicate that color along the gradient. Hold down the Option key and drag



JUDGE YOUR COLOR on a gradient.

one slider onto another to swap the positions of two colors.

FREEHAND

■SMUDGE TOOL: To make a smudge that extends out from the center of the object (like a glow), hold down the Option key as you drag the Smudge tool.



CREATE A LITERAL SMEAR campaign. It's your option (key), you know.

■FREEFORM TOOL: Hold down the left arrow key to decrease the size of the effect of the Freeform tool. Hold down the right arrow key to increase the size of the effect.

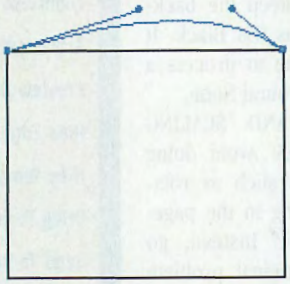
■KNIFE TOOL: Double-click the Knife tool and check Closed Cut Paths in Knife

SWISS

HOW ELSE DO YOU THINK the Swiss make their cheese?

Options. Then set the Knife to a large width. The Knife will work like an eraser, eating away paths.

■CURVED LINES: Hold down the Option key and drag on a straight line segment to curve it.



IT'S NOT ALWAYS hip to be square.

■SELECT UP IN A GROUP: Select one point or object in a group, and then press the tilde key to select up the levels of the group. Or you can use the command Edit, Select, Superselect.

■KEY INTO INSPECTOR PANELS: Command–single quote (') jumps to the first field in the first visible Inspector palette. Tab to get to the field you want or use Command–single quote again to jump to the next Inspector. Press Enter or Return to apply whatever changes you've made.

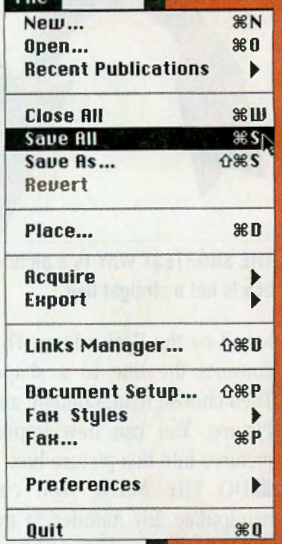
PAGEMAKER 6.5

■COLOR FRAME CONTENTS: Click a frame to select a PageMaker frame element. Then click a color in the Color palette to change the background color. Secret tip: Command-click on the frame to select the object (for example, a gray-scale image) inside the frame element. Then click a color in the Color palette to change the object's color.

■SAVE ALL OPEN DOCUMENTS: Hold down the Option key as you choose File, Save. The Save command becomes Save All.

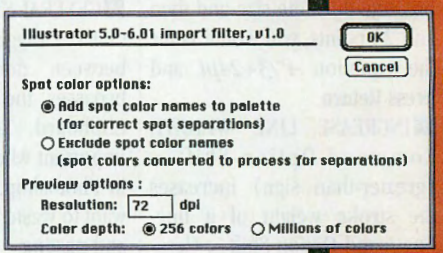
■CLOSE ALL OPEN DOCUMENTS: Hold down the Option key as you choose File, Close. Close then becomes Close All.

■ADD A NEW PAGE: Press Command-Option-Shift-G to add a new page immediately following the page on which you are currently working.



IT'S SAVE ALL or nothing.

■IMPORT NATIVE ILLUSTRATOR FILES: Some people have found that importing native Illustrator files into PageMaker 6.5 causes the file size to bloat. To prevent this, first check



KEEP THE FILE, lose the fat.

Show Filter Preferences in the Place Document dialog box. Then set the Preview Options filter for 72-dpi resolution and 256 colors. This keeps the file from exploding in size when you bring it in.



COLOR ME YELLOW. I've been framed.

APPLY MACADDICT'S NEW SPF 15 SCREEN-BLOCK LOTION TO PREVENT SEVERE BURN-INS.

DO'S AND DON'TS

■ Do buy a dark-colored monitor rather than a beige box because they offer better contrast with the screen. Dark borders around a monitor screen provide the visual effect of a brighter, sharper display, and dark plastic won't yellow with time the way light-colored plastic will.

■ Do use a monitor hood to maintain consistent screen color. Light changes in most rooms as the day wears on and as electrical lights fluctuate. These subtle changes in lighting can affect how you perceive the colors on the monitor. Slapping a hood on your monitor reduces the impact of these fluctuations for a more stable color appearance.

■ Do use your CD-ROM's built-in volume control to listen to music. If you pop the faceplate off your CD-ROM drive, you should find its native volume control dial and headphone jack. From the Monitors and Sound control panel, select None for the sound-monitoring source. This makes your CD sound independent from your computer's sound. Plug a pair of headphones directly into the CD-ROM drive and vary the volume of music while your computer chirps away at its own set amplitude.

■ Do buy lots of RAM. RAM is your best friend. Figure out how much you can possibly afford, and install slightly more. Things will crash less, technologies you thought were hoaxes (including, say, RealAudio) will work, and some applications will speed up.

■ Don't plug and unplug devices while your Mac is running. The Mac maintains a steady flow of current through most of its ports, so to avoid shorting things out, always shut down before connecting or disconnecting a keyboard, mouse, or other cool hardware add-on...unless you have an iMac. The iMac replaced SCSI and ADB with USB, which is hot-pluggable, meaning you can connect USB devices without restarting your machine. SCSI and ADB both require you to shut down your Mac.

■ Do deploy a RAID (Redundant Array of Independent Disks). If you own two or more large hard disks, stripe them into a RAID. You can do this with software from companies such as Optima Technology or Adaptec. Your computer will see the hard disks as one and write to them simultaneously, greatly speeding up throughput.

TROUBLESHOOTING

■ If your Mac crashes or acts weird for no apparent reason, odds are your Parameter RAM has turned to the dark side. When you can't remember the key commands required to zap your PRAM back to the right side of the force, just think *copper*—a handy mnemonic device that stands for Control-Option-P-R. Hold down these magic keys while rebooting, until you hear the Mac's start-up chime five times.

■ If your hard drive or your CD-ROM drive mysteriously disappears from your Mac's awareness, you might want to check to make sure that your internal ribbon cables are still connected. Some Macs get a lot of shaking from fans, CD-ROM drives, and hard disks, all of which can unseat an internal drive chain.

■ A bad motherboard battery creates a constant state of confusion (kind of like Alzheimer's for the PRAM) and could cause your Mac to start up sometimes but not other times. If this sounds like your situation, try replacing your motherboard battery.

■ Don't use common electrical devices to clean out your Mac. You may think that you're being clever when you use a dust buster or hair drier to blow out dust bunnies, but you're building up a whole bunch of static electricity around components that don't like static electricity. Use either compressed air or a special vacuum designed to clean electrical components.

■ To fix SCSI problems, buy a SCSI Sentry. APS Technologies (http://www.apstech.com) sells a great device that will make your SCSI problems go away. The SCSI Sentry and the the SCSI Sentry II monitor your SCSI chain and fix errors as they occur.

■ Make sure you assign different devices in a SCSI chain different numbers. Assigning two the same number is a sure way to halt your computer's functionality and possibly even corrupt data.

■ If you have two Ethernet-capable Macs and would rather play networked, full-screen Marathon than share a printer, buy an Ethernet cross-over cable. You can get one for about five bucks at an electronics store, and it will give you Ethernet network speed without the expense of a hub.

■ If your hardware-expansion plans mean that you will have to buy external hard drives, Iomega drives, and CD-Rs because you don't have any free ports in your Mac, save your money. Instead, invest in an empty PC case and internal SCSI devices (which are much cheaper) and build your own SCSI device case. PC boxes, which come complete with a power supply and slots for SCSI devices, cost around $65. Just buy an internal SCSI ribbon and an internal-to-external port converter and start saving.

SPEED AHEAD

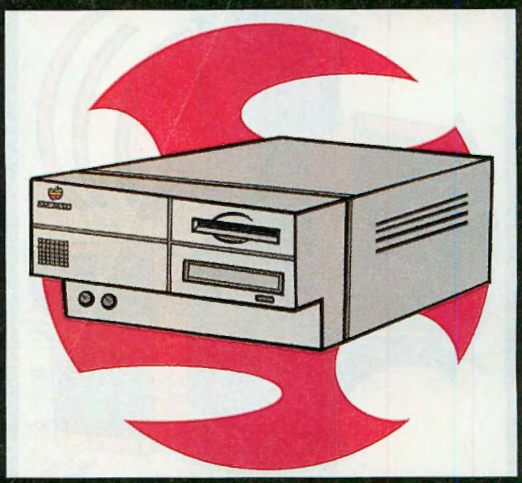
tip-off

TIP-OFF

If you need extra processor speed and crave danger, the mother of all bad ideas may be just the ticket for you. On every Mac (and every computer) is a clock chip that tells the machine how fast to go. Tell the clock to tick faster and the whole machine speeds up.

So why not crank a mere 33MHz machine up to, say, 700,000 MHz? First of all, it would glow white-hot and suck the electricity out of every building in a three-county radius. Second, not all chips run well at high speeds. Or sometimes they run fast for a while, only to crash with bus errors. If you buy a clock-chip accelerator and see strange crashes and bus errors right after installation, pull the chip and send it back for a refund.

Clock chipping is not for the weak of heart, but if you need the speed and have no other alternatives you should check out Output Enabler at (http://www.io.com/~oe/Products.html). A snap-on accelerator kit will cost you from $10 to $80.

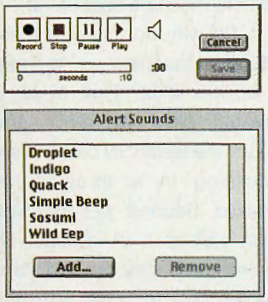


tip-off

TIP-OFF

AUDIO

■ The Mac startup sound is burned into ROM, making it both immutable and unmutable (except by putting a dummy plug into the Mac's audio out), but you *can* record your own system beep. From your Apple menu, launch Simple Sound, and you'll see the Alert Sounds window listing the standard eeps and quacks. Click the Add button



WORK TO THE SOUND of your own beep.

and, in the window that opens, record your sound via your Mac's PlainTalk microphone. Save it, select it, and you have a new system beep. All other Mac functions will stop while it plays, so keep it short and sweet.

■ Use Brian's Sound Tool (ftp://mirrors.aol.com/pub/mac/sound/soundutil/briansoundtool1.3.sit.hqx) to make SND files, which play when you double-click them. Just drop your sound files (they can even be PC sounds) onto the utility and it will convert them to SND format.

■ Digital audio comes in a variety of file formats—some your Mac can't play, and some Brian's Sound Tool won't recognize. Visit http://www-cs-students.stanford.edu/~franke/soundapp/#information for the latest version of Norman Franke's SoundApp for drag-and-drop conversion of all common file formats, as well as uncommon ones such as Psion sound, Ircam, and ScreamTracker 3 module.

■ Audio distortion doesn't have to be a bad thing. Tom Erbe's classic shareware, SoundHack 0.881 (http://www.gmeb.fr/SoftwareCompetition/SoundHack.html) does time stretching, pitch shifting, vocoding, varispeed, spatializing, ring modulation, spectral mutation, noise reduction, spectral expansion and compression, and even more. Confused? You won't be for long: SoundHack is a great way to tune up on audio basics. The program also plays most sound formats, records sounds of any size, imports sound files from audio CDs, and converts sound file formats.

■ Rod Kennedy's SoundMachine 2.7.1, downloadable for $10 at http://www.kagi.com/rod, plays native Mac audio as well as sounds in the AU format, which is popular for the Web. You can play sounds backward, change their speed, loop them, switch formats, change sample rate, and perform other tricks. Sound Machine works with files of any length and can play in the background while you work.



FACE THE MUSIC with SoundMachine.

■ The Macintosh Simple Sound recorder limits you to recording 10-second-long system sounds, but Sound Recorder ($9.95 at http://www.virtualsoftware.com/softdisk/d10318/) is limited only by the RAM in your Mac.

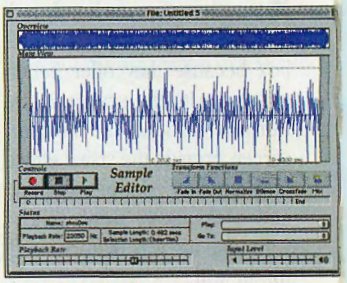
■ The venerable Mac audio Web site, pub/mac/sound (http://www.host.ots.utexas.edu/mac/pub-mac-sound.html), has been offering the best of the best of Mac audio shareware for years. Here, all on one site, you can find ConvertMachine 1.0.6, Digital Oscilloscope 2.1, Frequency Meter 1.0, MPEGAud 1.0, NetDeck 1.0, SoundApp 2.2.2, and SoundEffects 0.9.2. If you don't insist on having the absolute latest version of your audio shareware, this is a handy way to get it all at one place.

■ Open the QuickTime Settings control panel, click the button in the window, and choose Auto-Play. Then click the Enable Audio CD AutoPlay check box to hear your new Hanson CD rock your Mac as soon as you pop it in. Open the Apple CD Audio Player (under the Apple menu) to call up controls that allow you to flip between tracks and pause.

■ SurfSim, a $10 shareware program at http://members.aol.com/carlhuben, plays the sound of the ocean surf from your Mac.

■ Make your own startup or shutdown sound by putting an SND file in the startup or shutdown folders. You'll still hear the "phong" sound at startup, but your sound will play next.

■ Sample Editor (http://sol.ultralab.anglia.ac.uk/pages/schools_online/using_audio/sound_utils.html) opens AIFF, SND, and compressed audio files, and records with the PlainTalk Microphone. The cool thing about Sample Editor is that it lets you see a graphic representation of a sound, which you can zoom in or out and scroll through. Sample Editor lets you cut and paste different sounds together, fade a sound in and out, cross-fade two different sounds for a seamless audio splice, and manipulate sounds in a number of other ways.

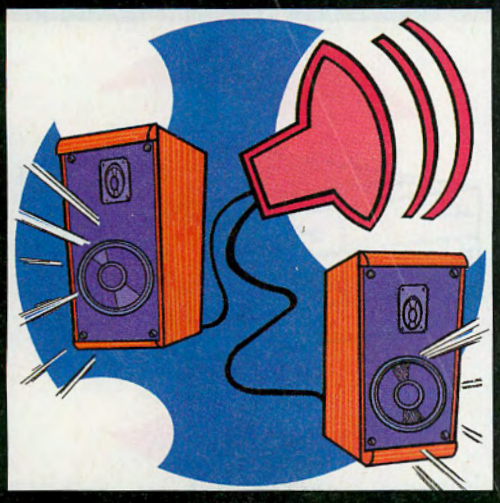


SAMPLE EDITOR opens your eyes to the world of audio.

■ Learn the difference between AIFF and SND at Sound O Rama (http://www.soundorama.com/formats.html), where you'll find explanations of all the most commonly used sound file formats.

■ If you're bored with the music in your games, or if your email alert sounds too generic, you can swap in more personalized sounds with either of two shareware utilities. Agent Audio Pro 1.2 (http://www.clixsounds.com/products/agentaudio) allows you to see and play sounds embedded within your programs or files and replace them with your own sounds. Another utility, Wired for Sound, ($14.95 at http://www2.viaweb.com/pittsburgh/wirforsoun.html) features the Sound Stripping Utility, which extracts sound files from any file or program and allows you to install a new one. Wired for Sound also includes over 500 16-bit stereo sounds and phrases in more than 20 sound categories, including cars, groans, planes, voices, and more.

■ Check out the Music and Audio Connection (http://www.musicandaudio.com) for three programs that will turn you on your ear. Ear Training 2.41 helps you practice identifying note intervals, chords, and scales. Ear Workout 3.1 provides workouts on recognizing intervals, chords, and arpeggios, and on singing intervals. Grab Audio captures the audio from an audio CD in the Mac CD-ROM player and saves it in a



IF FILE SIZE IS ABSOLUTELY CRUCIAL, TRY QUICKTIME 3.0'S NEW NXVWL COMPRESSION. YOUR AUDIO FILES WILL SHRINK 90 PERCENT WHEN NXVWL THROWS AWAY ALL THE VOWELS!

number of file formats.

■ QuickTime 3.0 supports just about all the audio files in existence, synchronizes audio and video playback, and allows for an unlimited number of audio tracks. It also includes an improved, software-based music synthesizer equipped with a quality set of sounds. You can cut and paste together videos using sounds you've recorded with the shareware mentioned here to make your own QuickTime movies complete with dialogue, sound effects, and a music background.

■ Assign a sound to any event—from key clicks to error messages—using Bruce Tomlin's SoundMaster (http://lonestar.texas.net/~btomlin/soundmaster.html). The current version, 1.8.4, is not Mac OS 8-ready, but this just means it can't assign sounds to window zooming and Trash emptying.

■ Visit Apple's Web site (http://www.apple.com/quicktime) to see and download QuickTime extensions, plug-ins, and helper software such as MoviePlayer.

■ You can find links to hundreds of MIDI files of all kinds at All About Perth: Music & Lyrics (http://www.wantree.com.au/~marty/world/audio.htm#music). Download a MIDI file and drop it onto the QuickTime MoviePlayer. To play the QuickTime synthesizer in your Mac, click the start button of the file that appears.

■ Apple QuickTime evangelist Charles Wiltgen has a Web page at http://www.quicktimefaq.org/software with lots of QuickTime goodies. One of the best is the QuickTime Music Architecture (QTMA) Atomic Editor. This utility gives you the tools to create digital musical instruments for any QuickTime synthesizer, including Apple's built-in software synth. Use the instruments you create with any application (for example, MoviePlayer) that handles QTMA.

■ For professional recording quality, bypass the PlainTalk system entirely and pick up a sound card that accepts standard line-level audio. Cards such as the Audiomedia III from Digidesign (www.digidesign.com) or the 1212 from Korg (www.korg.com/sndnk1.htm) offer RCA jacks that accept standard plugs and levels.

VIDEO

■ Media Cleaner Pro (http://www.terran-int.com) optimizes and compresses QuickTime movies that are designed to play back on computers. Media Cleaner works with any of the standard QuickTime codecs, such as Cinepak or Indeo, and can create RealVideo, RealAudio, VDOLive, and AIFF files. Media Cleaner has special filters that preserve the quality of video files you compress, and it offers time-saving features for managing compression jobs.

■ If you want to include QuickTime videos on your Web site, visit Apple's Web site at http://www.apple.com/quicktime for handy how-to's and instructions.

■ If you have the QuickTime plug-in in your Web browser but movies don't play back smoothly, you may have your Mac's Virtual Memory turned on. Go to the Memory control panel and turn it off.

■ If you want to edit your QuickTime movies but you don't have expensive editing software, the QuickTime MoviePlayer allows you to cut and paste any media element—video, audio, text, MIDI—into an existing movie. Copy the material you want to add, move the slider in the target movie to the point where you want to add in the new material, and choose Paste from the Edit menu. This seamlessly inserts the new material.

HOW TO CONVOLVE SOUND WITH SOUNDHACK

Most people spend an entire lifetime without experiencing the slightest desire to convolve two sounds. Then there are those who, having learned such a process exists, never find true happiness until the convolving engine is humming reassuringly beneath their fingers. For those of you who fall into the latter category, the road to nirvana follows.

STEP ONE: SOUND ONE



After downloading, installing, and launching SoundHack, go to the File menu and open an AIFF sound file or import an SND file. Alternatively, the File menu opens a record dialog with which you can record a new AIFF using the Mac microphone.

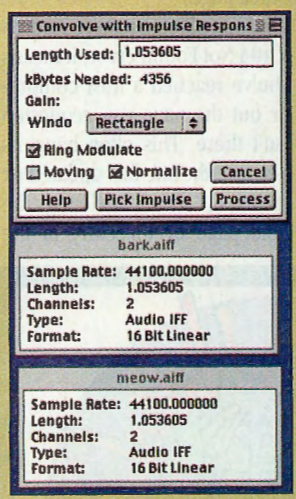
STEP TWO: SOUND TWO

Find a second AIFF file on your disk, or record and save a new one. Keep this file closed.

STEP THREE: HACK

With your first file open, go to the Hack menu and choose Convolution; you'll see a dialog with several parameters. Leave Gain at 42dB, choose any value you want from the Windo button, check Ring Modulate, and click Pick Impulse.

STEP FOUR: CONVOLVE



In the scrolling dialog, open the second AIFF you chose earlier, then click Process in the Convolve panel.

What happens is that SoundHack multiplies the frequency spectra of the two files in such a way that it reinforces frequencies common to both, synthesizing a new sound file. You pretty much have to hear the results to get a sense of how this sounds, but if you listen to anything from *The X Files* to *Star Trek,* you'll recognize the general effect: a weird, robotic, metallic, distorted mix of the two sounds. It may take a little experimenting (and it's a really good idea to read the manual), but when you're done you'll have a unique candidate for a new system sound. And as a bonus, turning a mono sound into stereo with SoundHack's Binaural filter will be a conceptual snap.

tip-off

TIP-OFF

NETSCAPE NAVIGATOR AND MICROSOFT INTERNET EXPLORER

■ Click and hold a link to open the link in a new window.

■ Click and hold an image or QuickTime movie to save it to your hard drive or clipboard.

■ In Netscape Navigator only, click and hold inside a frame to open it in a full window. This also reveals the frame's URL in the Location text box, which makes for easy bookmarking.

■ You may already know that you can type *companyname* into your Web browser's URL box and it'll look for http://www.companyname.com. But don't forget you can include directory info: Type *company name/directory* to have the browser check http://www.companyname.com/directory.

■ Make it a habit to open two windows in your Web browser. Then, while you wait for insanely large graphics to download in one window, click on the other window and go in search of other pages.

■ If your Web browser returns a 404 Not Found error, it means you've reached a host computer but the page you requested isn't there. This often happens because the site has updated or changed, so try deleting the final page or directory in the URL. For example, if typing in http://www.chortle.com/myhouse/bathroom.html returns the dreaded 404 Not Found, try deleting the words *bathroom.html*. Also check for typos in the URL.

■ If you don't have Internet Config (ftp://ftp.share.com/internet-configuration), get it now—it's a must-have, and it's free. Just put scads of Internet preferences into Internet Config's boxes, and from that moment forth all your Internet apps will automatically pull most of their settings from it.

■ One of the most useful Mac tools you'll ever own is the free Stuffit Expander (http://www.aladdinsys.com/expander/expander.html), which expands several types of compressed files. For the most transparent use of the utility, set all of your Internet apps to expand downloaded files automatically, and then set Stuffit Expander's preferences to delete the original.

■ Stuffit Expander alone won't decode common Internet file types, such as uuencoded and TAR files. But if you pick up the shareware DropStuff with Expander Enhancer ($30), you'll never find a file you can't convert.



FTP: FETCH AND ANARCHIE

■ You'll often find a useful read-me text file in an FTP directory, but don't download it. Instead, select View File in Fetch, View Selection in Anarchie—or press command-L in either application.

■ Download a file from Fetch or Anarchie by dragging it to the Finder.

■ Click the Date category in a directory window to see the most recently modified files at the top.

■ You can include your user name and password in an FTP URL, which saves you from having to retype them every time you go back to the site.

■ When you paste an FTP URL into a Get Via FTP window in Anarchie, the URL's parts appear in the correct fields automatically.

■ Highlight any file or directory in a Fetch or Anarchie window and copy its name. You can then paste the entire path into any other application.

■ If you know a file must be on a particular FTP server, but you have no idea which directory holds it, launch Anarchie. Select FTP from the FTP menu, and check Index Search in the FTP box. Then fill in the FTP server in the Server box and the file name in the Index box. Anarchie will search the whole site for your file. If the server does not support an index search, you'll get an error message such as "Index command not implemented."

■ If your FTP connection is refused, try a simple at sign (@) as your password instead of your email address. If your FTP application crashes, try a hyphen as the first character of the password.

CLARIS EMAILER 2.X

■ Fog City, the original developer of Emailer, posts many Emailer extras and utilities on its Web site (http://www.fogcity.com/em_utilities2.0.html), including Emailer Archives, which lets you move all of your read email into a FileMaker Pro archive. Why would you want to do this? Easier and more powerful searching, for one thing; off-site storage, for another; and, most important, the Emailer database can quickly grow to dozens of megabytes in size, and your backup application will otherwise back up the entire database every day.

■ Emailer allows you to drag and drop almost anything. For example, you can select a group of email messages in your in-box and drag them all to the same folder at once.

■ You can set your reply preferences so that your replies are automatically addressed to every recipient in the original, or addressed only to the sender. If you hold down the Option key when choosing Reply from Emailer's Mail menu, that preference temporarily reverses.

■ Command-single quote (') pastes any text into the body of an email as a quote.

■ To file any selected or open email messages quickly without reaching for the mouse, press Command-Option-F, type the first letters of the folder name, and press Return.

■ Press Command-Option-C to copy an entire email message, including the body, subject, and header text.

■ You can't drag an email message from overview to the desktop to create a clipping file. But you can open a message, select all the text, and drag the selection to the desktop.

■ You can set both Claris Emailer and Qualcomm's Eudora to skip very large messages. In Emailer 2.x, the setting is located in the Options panel of each account's Accounts dialog, under the Setups menu. In Eudora Pro, look in the Checking Mail settings.

EUDORA PRO

■ If your recipients complain that strange line breaks in your email messages make them virtually unreadable, open the Composing Mail preferences window (in Settings under the Special Menu) and turn on word wrap.

WHEN SELECTING AN ISP, ASK IF IT SUPPORTS THE IMAC EMAIL PROTOCOL. IT WON'T MANAGE YOUR MAIL, BUT IT MAKES YOUR MOUSE LIGHT UP WHEN YOU OPEN A MESSAGE.

HOW TO SET UP A PERSONAL WEB SERVER

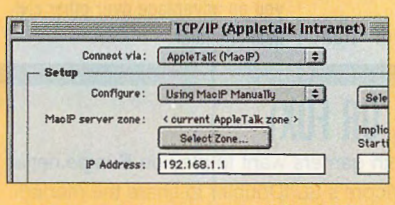
In the very first issue of *MacAddict*, we showed you how to set up a tiny area network, or TAN (http://www.macaddict.com/issues) for file sharing among the desktop Macs and PowerBooks around your house. If your TAN is up and running, you can convert it to a home intranet—essentially a mini Internet on your local network—and then use Apple's Personal Web Sharing to share documents with other computers on the network.

OS 8 installs Personal Web Sharing by default, but you'll want to download the latest version (1.5) from Apple's FTP site (ftp://ftp.info.apple.com/Apple_Support_Area/Apple_SW_Updates/US/Macintosh/Networking-Communications/Personal_Web_Sharing). Open Transport 1.1.1 or later is required.

PART ONE: SETTING UP THE SERVER

The Mac that shares documents with other networked computers is the server. Any Mac on your network can be the server, although you'll probably want to use a desktop Mac that's always on. (You'll still be able to use the server Mac for other purposes; you just won't be able to log onto the Internet without first disconnecting it from the intranet and switching to PPP.)

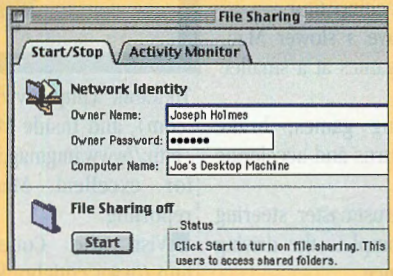
STEP 1 Open the Chooser and check to make sure AppleTalk is active. Then open the TCP/IP control panel and press Command-K for Configurations. Duplicate an



existing setup, rename it "AppleTalk Intranet," and click Make Active. Then change the settings to match our illustration—Connect Via AppleTalk (MacIP), Configure Using MacIP Manually, and set your IP address to 192.168.1.1. Leave the other settings blank.

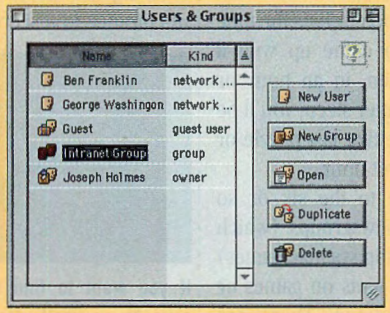
- Skip to Step 5 if you want every Mac on the network to have read-only access to your shared folder.
- Continue to Step 2 if you want more control over access, such as the ability to exclude some users or to allow selected others to download files.

STEP 2 To control access to the shared folder, use AppleTalk file sharing and set up Users & Groups privileges. Open the



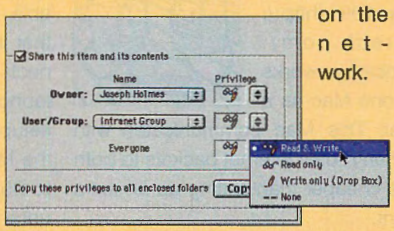
File Sharing control panel and turn on file sharing, by clicking the start button.

STEP 3 Open the Users & Groups control panel to create new users or to assign users to groups. If you want every



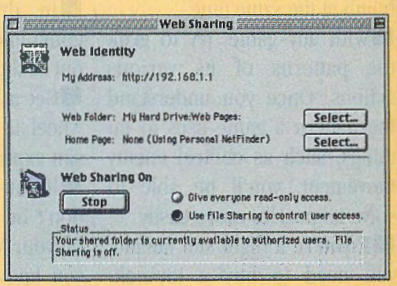
user to have full access, set all categories for full read and write access.

STEP 4 After file sharing has finished starting up (when the folders on the shared drive appear with black tabs), go to the Finder, select the hard drive containing the folder you want to share, and choose Sharing from the Finder's Edit menu. In the hard drive's Sharing dialog box, set the privileges for you, any groups you created, and everyone else on the network.



STEP 5 Now set the Web Sharing options. Open the Web Sharing control panel and select your Web Folder. When you installed Personal Web Sharing, the installer created a folder called Web Pages on your hard drive: Use that folder or any other folder you like.

For Home Page, either select your own page or select None, in which case visitors will see a hyperlinked list of files in the folder.

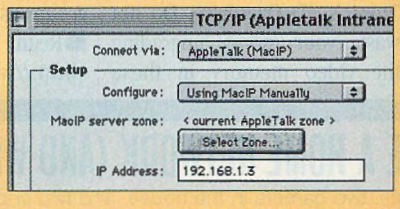


If you've set access privileges using file sharing, click the radio button Use File Sharing To Control User Access.

To start sharing, click the Web Sharing Start button, as we've done above.

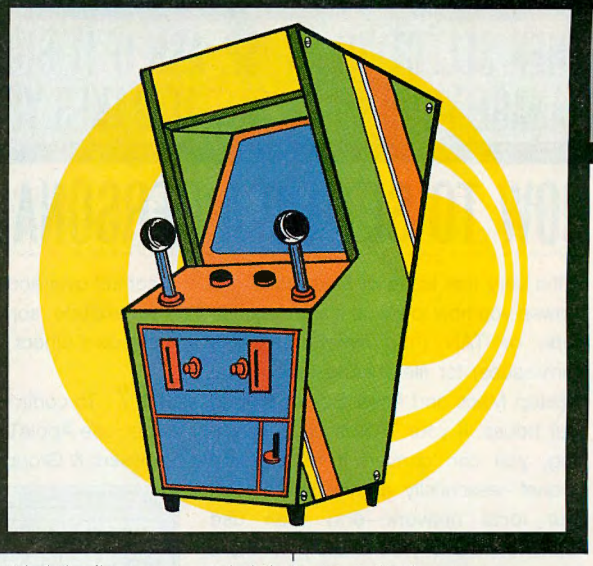
PART TWO: SETTING UP THE CLIENT

The computers that will read the documents on your server using a Web browser are the clients. On each of the Macs connected to your AppleTalk network, open the TCP/IP control panel. Then set it up exactly as you did the server, with one exception: The IP address must have a different final number on



each machine. For example, the server address you set up is 192.168.1.1, so your first client can be 192.168.1.2. You can use any number from 1 to 254 after the third period, as long as no two clients have the same number as each other or as the server. Save that configuration with a handy name (such as AppleTalk Intranet), then close it. Each client can access the documents on your server using the server's IP address as the URL—in this case, http://192.168.1.1.

GAMES



BASIC BATTLE PLANS

■When remapping the controls for a game, remember the limitations of the keyboard. Most keys can only send events one at a time, so you can't have more than one key pressed and have the program react to each key. The Shift, Control, Option, and Command keys, though, can send signals when other keys are down. Use these keys if you want to be able to shoot and bomb at the same time.

■With any game, try to grok the patterns of its various actions. Once you understand the pattern a game uses to do things, such as control enemy movement, you'll be able to solve its puzzles more easily.

■If you're a flight sim fanatic, you need to buy a joystick. Optionally, add a throttle to your setup.

■Read all kinds of ancient myths—Roman, Greek, Nordic, Celtic, Eastern—to catch references and possible solutions in games.

■Don't believe that the "3D acceleration" inside the Power Macintosh G3 will make your games play any faster. The chip inside is a generation behind the current standards available in TechWorks' Power3D card, ATI's XClaim VR, or VillageTronic's 3D Overdrive. Do not waste your money upgrading the video memory in these machines. Instead, just buy a better video card.

■To get the absolute cheapest 3D acceleration on the market, buy TechWorks' PC version of the Power3D (for about $150), then download the Mac drivers from the TechWorks Web site. Don't pirate TechWorks' hard work by buying a card from a competitor.

■If you have a slower Mac, run action games at a smaller resolution.

■In driving games, brake going into turns and accelerate out of them.

■Get a Thrustmaster steering wheel to complete the driving sim experience.

■If you get stuck in a game, don't be afraid to get up, turn off your Mac, and go outside—you know...the place with that bright shiny thing called the sun. Clearing your head or just doing something else can often give your subconscious the time necessary to come up with a solution. Then, in an hour or so, or even after sleep, you'll be able to solve that last puzzle or find the secret door.

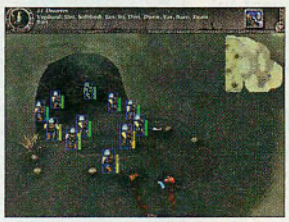
■Subscribe to the six or so Mac game newsgroups (which start with comp.sys.mac.games) to get more hints on games or to ask questions. There are often game-specific newsgroups as well.

■Read Mac Gamer's Ledge (http://www.macledge.com), Tikkabik (http://www.tikkabik.com), and Inside Mac Games (http://www.imgmagazine.com) for excellent Mac games reporting.

■Visit the Codebook at http://www.codebook.pp.se to download or browse hundreds of cheats for Mac games.

STRATEGY

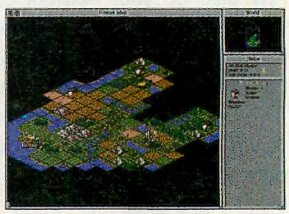
■In the Sons of Myrgard Myth level, explore all caves to find an entrance to a secret level.



If you want to find the secret cave by yourself, don't look at the map in the upper right corner—oops, too late.

■When fighting with light units in Myth, target opponents properly. Don't waste warriors fighting thrall, or chase archers with thrall. Instead, try to foul up enemy warriors in your own thrall, and quickly eliminate archers with ghôl and warriors. Targeting wights with thrall is a great elimination tactic.

■In Master of Orion II, don't bomb all of a planet's inhabitants away. Instead, convert them to happy workers for extra points.

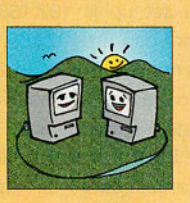


In Civilization II, explore your surroundings early—especially villages—so you can earn civilization advances, settlers, military units, and gold. These will give you an advantage over other civilizations later.

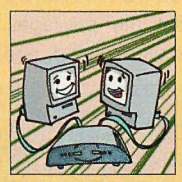
HOW TO SHARE A HOME NETWORK (AND WE DON'T MEAN ABC, CBS, NBC, OR FOX)

So you have two Macs, two gamers in the house, and two copies of Myth: The Fallen Lords. Problem is, both gamers want to play on Bungie.net at the same time, but you have one modem and one ISP account. Solution: Set up a home network that uses Vicom's SurfDoubler to share the modem.

1 SET UP AN APPLETALK NETWORK. You need Ethernet instead of LocalTalk to increase network bandwidth. For this, you can either use our crossover hardware cheat, or set up a network using a hub. Check out our Nov/97 issue for the article, "Hook Up Your Macs with Superfast Ethernet," which explains exactly how to do this.



2 INSTALL VICOM SURFDOUBLER. Buying it will set you back $99 (http://www.vicomtech.com). Vicom's technology works by setting up one Mac as a software router. This Mac communicates with your ISP and then routes Internet packets to both Macs. Plus, it's cheaper than setting up an extra Internet account.



3 DUKE IT OUT! Since SurfDoubler is scriptable, you can write a script that launches the app, connects to the Internet, then launches Myth. With this setup, the client Mac will not be able to host, but the Mac that's running SurfDoubler can. Log on to Bungie.net with both accounts and go into an unranked room to test out the connection.

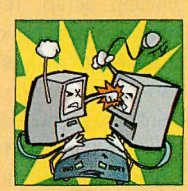


Illustration by Chris Vanderhoof

A DAILY JOGGING ROUTINE BUILDS UP STAMINA VITAL IN MARATHON.

ADVENTURE

■In Sierra's Rama, the whole Rama universe has a repeating pattern involving the number three. Trying to find patterns involving the number two or four would be fruitless.

■In adventure games, look for parts of the picture that don't quite blend to discover important clues or puzzles.

■Set up advantageous trade routes with hired cargo ships in Escape Velocity to jump right from a Scout to a Kestrel.

■Click on everything and anything and whatever's next to that.

■Bad Mojo has lots of Easter eggs hidden throughout each room. Explore far away from the actual puzzles with your cockroach to find them.

■Just because Myst elegantly integrates the reading of books into gameplay doesn't mean you have to read every piece of journal drivel written in an adventure game. Most of them are me-too copiers, and you can skip right to the drawings for any needed clues.

PUZZLES

■In block puzzles such as MacSokoban or Blobbo, don't push blocks into corners unless you absolutely know that you won't need to move them again. Try not to push them up against walls, either.



IN APEIRON (or Centipede), don't clear away too many mushrooms from the bottom, or you'll get bombed.

■In arcade puzzlers such as Chiral, Tetris, or Troubled Souls, puzzle pieces fall at an ever-increasing rate. Train yourself for speed at lower levels to succeed at the higher levels.

SHOOTERS

■In a shooter, figure out which action you'd want to have happen for a length of time, such as running or autofiring. Map that action to the Caps Lock key, so you don't have to press and hold down one key for an extended period.

■In early arcade games such as Space Invaders, the swarms of aliens fly in a predictable formation. Learn the formations to kill the enemies without taking a hit.

■Arcade gamers should buy an external controller such as Gravis's GamePad or MacAlly's Batwing.

■Don't play Rob Capps in multiplayer Marathon. He'll beat you every time.



Oooh. Scary.

■You can skip the entire last level of the original Marathon by using the triple-shield generator and picking up rockets at the entrance, then shooting the rockets at the ground (from the right spot, of course). This propels you up to the teleport platform.

■Enter *SMITE* in Shattered Steel's console to smite your current target.

ROLE-PLAY

■In role-playing games such as Exile, increase the skills of *all* members of your troop. A level one cleric may not do much, but you'll love his level 12 healing.

■You can sneak past mutants easily in Fallout if you're not tough enough to fight them yet.

■In Heroes of Might and Magic II, press 911 to finish the level.

MACADDICT CITIZENSHIP QUIZ

So you say you're a Mac addict, do ya? Well, we say—*prove* it. We're calling your bluff with nine tough questions based on this month's "Tip-Off," as well as random *MacAddict* trivia from issues past. Solve these stumpers and you'll become a certified Mac addict with a membership card to prove it. Impress us with a killer bonus tip of your own and we'll enter you in a drawing to win a library of 10 awesome Mac books from Peachpit Press.

Hurry and submit your answers to http://www.macaddict.com/contest or by snail mail to *MacAddict* Citizenship Quiz, *MacAddict*, 150 North Hill Dr., Brisbane, CA 94005. Membership cards will be distributed while supplies last. The contest ends on August 31, so what are you waiting for?

Mac Stumpers

1) Which action *can't* be performed via a keyboard shortcut?
a) Launching an icon
b) Trashing a file
c) Emptying the Trash

2) COPPER is a mnemonic device for remembering to:
a) Back up the hard drive
b) Rebuild the desktop
c) Zap the PRAM

3) The audio shareware program not mentioned in this article is:
a) SoundMachine
b) Sound Editor
c) Sound Hack

4) Which of Adobe Illustrator's key command shortcuts didn't change from version 6 to 7?
a) Group
b) Ungroup
c) Release Guides

5) Which action will not speed up your Mac?
a) Turning off folder size calculation
b) Turning off the shutdown warning
c) Turning off file sharing

Mac Addict Stumpers

6) Who wasn't a *MacAddict* reviews editor?
a) Dan Turner
b) Reuben Reynoso
c) Rob Capps

7) What is this man's connection to *MacAddict*?



8) What are the correct RGB values for the original purple and green colors of the *MacAddict* Web site?
a) 99FF00, 660066
b) CCFF66, 9966CC
c) 00FF00, CC33CC

9) Which one of these people has never been reproduced as an action figure in *MacAddict*?
a) Steve Jobs
b) Bill Gates
c) Larry Ellison

10) Show us *your* tips! Are you willing to take your best-kept Mac secret public? You'll earn a bonus quiz point and a brief mention in the magazine if we mention your tip in an upcoming issue.

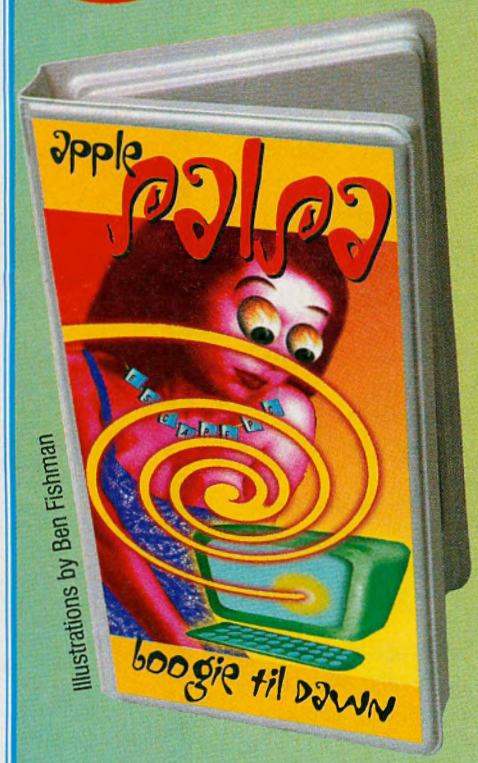
SUBLIMINALLY SUBVERT a PC USER INSTANTLY!

by Nikki Echler

NOTHING TO BUY, EVER!

At last! A shortcut to subverting PC users ANYTIME, ANYWHERE.

Absolutely GUARANTEED! Works in minutes, completely UNDETECTABLE, ODOR-FREE, AND SEMILEGAL!



Illustrations by Ben Fishman

Everyone Has Experienced Natural Subliminal Influence

Have you ever noticed how one friend will buy a PC and then, before you know it, others start buying PCs, too? Sure you have. Heck, everyone has. Do those people really want a Wintel machine? Or were they fooled into thinking they wanted one? Probably, they did want a computer. They bought a PC, however, as a triggered response. Marketing gimmicks persuade people to buy things they don't want every day.

A television commercial showing dancing bunny men can trigger a response in your brain that makes you think you want a computer with a Pentium processor. Sometimes you'll even reach for your wallet as if to buy one right then and there from the comfort of your La-Z-Boy.™ Why? The dancing bunny men are not really there and you don't really want a computer with a Pentium processor, but a natural desire lying dormant in your brain to own a computer has been stimulated by electron images on your television screen. Your body is seduced into feeling certain ways by means such as this every day.



Does Artificial Subliminal Mood-Altering Technology Really Work?

Yes and no. Many of the products sold via subliminal influence in years past have been mere hoaxes at best. Some were downright scams. With modern digital technology and impressive-sounding encryption methods, there is now a way to vastly improve the means of conveying subliminal messages. *MacAddict* has taken this mysterious technology and adapted it for these very special resistance tapes.



Thanks to exciting technological advancements made possible by Apple's Subliminal Developer Relations program, we have succeeded in reproducing Steve Jobs's powerful reality-distortion field and distilling it into virtually inaudible audio tracks. We then mix these subliminally subversive recordings with tacky music that you wouldn't even hear in your local Kmart. And because of hidden "previously unmarketed" capabilities of Apple's own QuickTime 3.0, it is now possible to bring the thought-altering message tracks much closer to the threshold of conscious recognition while still keeping them completely undetectable to the unsuspecting PC user. These revolutionary methods, which were not technically possible even 10 years ago, have been subliminally credited by many computer journalists as the real secret to Apple's amazing turnaround.

SEND NO MONEY!

10 subversion cassettes to choose from!

Most PC Users Have Repressed Desires to Own a Mac

Most PC users will admit that they would love to use a computer that didn't require constant maintenance, frustrating repairs, and cumbersome installs, but they refrain from going Mac because of social pressures. PC users who say no to Macs often really want to say yes, but they repress their natural appetites for Apple's machines because of peer pressure! "What would my boss think? Every idiot I know uses Windows."

Who knows how many millions of Macs have never been sold because PC users think their computer should be "hard to use," when they really want just the opposite? Apple resellers get tired of being asked to "compete with Microsoft," suffer from low sales, and eventually get cut off by Apple. Sadly, in this way both PC users and Mac users end up cheated out of their chances for happiness.

What Are the Limits of Subliminal Influence?



For years people have been promoting the idea of using subliminal thought control to assist in eliminating PC users, but this has been found to be an unrealistic goal. It will never be possible to get rid of PC use entirely. Using negative subliminal influence to turn people away from Microsoft products is a waste of time, as the company has been basting the market with its own brand of thought control since the mid-1980s. This situation is about to change, however, as a new antitrust suit brought against Microsoft by our fearless government attempts to bar the company from subliminally forcing computer makers to use the Microsoft subliminal marketing messages that it ships *free* as a hidden feature of the Windows operating system.

How Do I Know the Hidden Message Tracks Are Really There?

With each cassette recording purchased, you also receive a second "dummy" tape at no extra charge! This free sampler tape uses "reverse" technology to bring the subliminal messages to the forefront so you can hear the otherwise subliminal subversive murmurings that will leave most stubborn PC defenders double-clicking in the throes of burning Mac passion.



Don't let your Wintel-loving friends or co-workers hear this tape! This is for your listening delight only! You will hear a sexy voice speaking in deep, subversive tones urging them to let go, tempting them with smoking processors, system-level scripting, font and color management, and lust-inducing innovations in case design. You'll also hear an excited PC user in the heat of CompUSA buying her first Mac and making the most subversive purchase you've ever heard! This is guaranteed to stimulate and excite even the most hard-core IS manager!

ACT NOW!

Here's How Not to Order Our Fine Products

We offer a variety of ways to order, none of which will really work because this is only a joke. On the following page you will not find any more information on how to order, either by check or money order. We know that you are concerned about security and privacy. You should be. These tapes do not really exist. Sending any money to the following address would be a tremendous mistake. However, if you feel compelled to waste cash on tapes that are certified to be 100 percent completely bogus, designed for your entertainment purposes only, you can send an unspecified amount to We Can't Believe This Worked, c/o *MacAddict*, 150 North Hill Drive, Brisbane, CA 94005.

30-Day Guarantee
If you are not 100% completely satisfied you have our sincerest apologies. Sorry.

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FIRST-CRASS MAIL BRISBANE, CA

Pumping Up a PowerBook 520/540

by T. Kelley Boylan

TO GET ALL THE STATS on this Mac and others, check out the AppleSpec Database on The Disc.

The Blackbird, Apple's 500-series PowerBook, made headlines even before it hit the streets. Based on a 68040 processor, it broke records by being the first portable computer stocked with a built-in trackpad, stereo speakers, Ethernet, and intelligent batteries. The Blackbird also was the first PowerBook with an upgradable CPU, an expansion bay, and two battery slots. Jammed with gadgets and stylin' in a curvacious, techno-matte black case, it was painfully cool.

A balance of good looks, desktop power, and portable convenience, the 500 series was designed to do *everything* a desktop machine could do, but at a fraction of the size—big news in 1994. The good news now is that as long as you don't use really big applications, the Blackbird still does everything a desktop model can. Mac OS 8.1 works great. Microsoft Office 4.2.1, no problem. Microsoft Office 98, no way, not without a PowerPC upgrade. But before we get all excited about rocking the night away with an Excel spreadsheet, let's take a look at what we have here.



What You Have to Work



The 520 and 540 are twins except for two traits: display and CPU. The 520 has a passive matrix LCD display and a 25MHz 68LC040 processor (no floating-point unit). The 540 has an active matrix LCD display and a 33MHz 68LC040—faster, but still no FPU. (See the section on displays for details.) First, let's talk processors.

The CPU

You can do a lot to bring the 500 up to speed. One simple fix involves faking out your Mac to make it think it has an FPU. If you need to perform big spreadsheet calculations or Bryce rendering, John Neil's SoftwareFPU performs the requisite math in software instead of hardware. Horribly slow compared with the action of a real FPU, this trick is best reserved for emergencies. If you have an application you must run and it must have an FPU, download SoftwareFPU from ftp://ftp.digital.com/pub/plan/oberon/MacII/SoftFPU301.hqx or ftp://ftp.wustl.edu/languages/oberon/OberonV4/MacII/SoftFPU301.hqx.

On a different tack, if you're willing to spend a ton of money to keep your PowerBook alive, you can upgrade your 520 with a 540 daughtercard. A 520 runs at 25MHz, but a 540 chugs along a little faster at 33MHz, so if you can find a 540 daughtercard, you're buying a 25 percent speed boost...for several hundred dollars.

Accelerator Boards

A 68040-based Mac still pulls its weight in today's PowerPC world, but if an 040's just not enough, dig up a NUpowr upgrade. Newer Technology made a series of cards that'll bump you up to a 603-based PowerPC running as fast as 187MHz—faster than a PowerBook 1400.

Unfortunately, Newer no longer produces the board, which makes finding one more of a search-and-rescue mission than a simple shopping trip. Prices vary widely and wildly, depending on supply, demand, and supplier, but you can try contacting Newer for old stock or tips on where to find used models.

If you manage to dig one up, be warned that installation doesn't work quite the way Newer had planned, so it's best not to use that company's instructions. Better ones are available at http://www.runtime.se/technical/pbinstr.html. If you're not sure the speedup is worth your time and trouble, check http://www.ogrady.com/bench/167bench.html for benchmarks. For a comparison of various PowerPC upgrades, take a trip to http://www.runtime.se/technical/pbfan.html.

Apple made its own upgrade that'll pump you up from a 68040 to a 100MHz 603e PowerPC. It's not quite as fast as the NUpowr upgrade, and it may be even harder to find, but it does the job. At several hundred dollars, though, the card (part number MS081LL/A) will cost you.

Upgrade Battery Caveat: The PowerPC upgrade can make Apple's Battery Reconditioner claim your battery is busted, even if it's not. VST Technologies' EMMpathy fixes this unfortunate misunderstanding. You can pick up a copy at http://www.vsttech.com/software.htm.

RAM

RAM addicts will be pleased to know that the 500 series is expandable to 32MB, enough to run any application on the market, at least for now. A stripped-down copy of System 7.5.1 with RAM Doubler and Maxima (both from Connectix) does a dandy job in just 20MB of RAM. (Maxima is a control panel that lets you boot from a RAM disk, as well as double your RAM.) Set up in this manner, a Mac not only runs well but also runs from a RAM disk, which means higher speeds and longer battery life. Unfortunately, Maxima was discontinued and is not easy to come by. RAM Doubler, however, is ubiquitous—buy the latest version from your favorite vendor.

For a spare Mac, 20MB will get you by. For a Mac you use every day for everything from email to project management, bump up the RAM. You'll need the 70ns RAM for the PowerBook 500's—it's the only size that fits.

Display

There's a slew of displays in the 500's, from passive matrix gray scale through active matrix color. The 520 has a dual-scan display, which is a somewhat sharper twist on the passive matrix concept. It comes in color or gray scale, but it doesn't refresh as fast as an active matrix. The display's a little faded and ghostly viewed at an angle, and faint lines may extend from window edges—an electrical thing. Also, the cursor tends to disappear when you sling it from one side of the screen to the other, only to resurface after you've spent a second or two searching for it. If you're sick of playing hide-and-seek, try Fat Cursors. It'll swell that little sucker up so you can see the I-beam and arrow cursors on *any* PowerBook. Available at ftp://ftp2.info.apple.com/Apple.Support.Area/disability-solutions/shareware/Fat_Cursors-122-cdev.sit.bin.

Active matrix screens, the standard for most modern laptops, are sharp and clear

Hardware Sources

Contact several vendors when you shop, and ask about warranties and return policies just in case. This list isn't comprehensive, but it's a good place to start.

The Computer Exchange
800-304-4639
http://www.compexch.com

Connectix
800-950-5880
http://www.connectix.com

Cyberian Outpost
800-856-9800
http://www.outpost.com

DataTech Remarketing
800-281-3661
http://www.datatech-rmkt.com

Electro Rent Remarketing
800-431-7716
http://www.geremarketing.com

MacResQ
510-689-9488
http://www.macresq.com

Mac Sales
800-729-7031
http://www.macsaleint.com

Pre-Owned Electronics
800-274-5343

Sun Remarketing
800-821-3221
http://www.sunrem.com

Networking

Farallon (recently renamed Netopia)
800-397-8508 (MacWarehouse)
http://www.farallon.com
http://www.netopia.com

Repair Services

DT&T Macintosh Services
800-622-7977
http://www.dttservice.com

from all angles, with no submarining. They also use twice as much power and cost an extra grand or more, but if you plan to hammer a Blackbird all day, you'll want one. If your PowerBook's a secondary machine, stick with passive matrix—you'll save on battery life and money.

If you decide to make the change, you can swap out a 520's passive display for a 540's active one—the video hardware on both machines is the same. But consider where you work and what you'll do with your PowerBook before you buy. With an active matrix gray scale, you can sit in bright sunlight, turn the backlighting off, and see the screen with crystal clarity while getting the longest battery life you'll ever have. A color screen in the same light will conjure up a few foggy images, and that's about it.

If you work at a desk, use an external monitor alongside the built-in display—500-series Macs support dual video. Put email on one display and documents on another, or palettes on one and art in progress on the other.

An external monitor will run at a resolution of 832 by 624, even with the internal running alongside at 640 by 840. (This is the PowerBook's maximum resolution, and there's no room to add VRAM.) External monitor cables run about $20 and are available from Cyberian Outpost, part number 43609.

Batteries

The "intelligent" battery, born and raised in the 500 series, was cursed at birth with just a slight handicap. Apple designed the battery to deplete as slowly as possible by putting a chip in it that communicates with the system software. Unfortunately, the processor within the battery can become corrupted and make your system believe that the battery is out of juice when it really isn't.

Instead of giving your battery its last rites, you can usually resurrect it with VST's EMMpathy or either of these miracle-working applications: Apple's Battery Reconditioner, available at http://www.apple.com.au/documents/prodgroup.html, and Jeremy Kezer's BatteryAmnesia, which is found at http://members.aol.com/jbkezer/shareware.html.

They'll fix battery problems in an hour or three, depending on how long the specific utility needs. If none of them work, it could be that the battery simply has held its last charge.

The PowerBook's internal power manager, which handles how the battery charges, can also become corrupt, and fairly easily. This can result in some bizarre behavior. To keep corruption at bay, always plug the AC adapter into the wall *before* plugging it into the PowerBook. If it dies anyway, there are excellent instructions on resetting it at http://www.westwind.com/pages/techref/pbpwrmgr.html.

SCSI In and Out

SCSI Disk Mode, one of the handiest PowerBook perks, turns your PowerBook into an external drive mounted on another Mac's desktop. You invoke it via a special 30-pin PowerBook SCSI cable. Plug one end into the PowerBook, one end into another Mac, and boot both machines—the laptop shows up as a mounted volume. This feature is unbelievably useful when you need to install software, synchronize files, or do some general data moving.

You'll need a special cable, an HDI-30, which is different from an HDI-29 (the standard cable for external devices such as a CD, Zip, or Jaz drive). The HDI-29 lacks a corner pin. It's fine for hooking up an external drive, but it won't get you into SCSI Disk Mode. Make sure your cable has either all 30 pins or a switch to flip between standard SCSI and SCSI Disk Mode.

Every SCSI device must have its own ID number; the PowerBook Setup control panel handles this. You'll know you have a conflict if the machine refuses to boot—no happy Mac means you have a SCSI identity crisis.

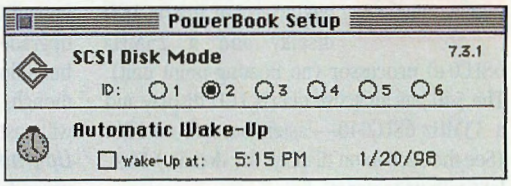
Networking

Like all Macs, the PowerBook 500-series machines shipped with LocalTalk built in, but they also have the luxury of built-in Ethernet for more powerful networking. To use it, you'll need an AAUI connector (Apple Attachment Unit Interface), which looks a little like a Phonenet connector but handles Ethernet cabling (RJ45, BNC, and so forth). You can order the standard twisted-pair AAUI from Apple (part number M0437) or from Asanté at http://www.gomark.com/html/networking/asante/friendlynetaauitransc.html.

You'll also need to plug into a network. It's possible to create your own network by buying a hub, but that's fairly complicated. If you only want to connect a pair of Macs at a full 10-Mbps Ethernet, cruise on down to your local computer store and buy an Ethernet crossover cable for $10 to $15. It looks just like a regular Ethernet 10BaseT cable, but two of its wires are crossed, so it can connect one Mac directly to another. You can't daisy-chain machines, but you can connect a pair and share files far faster than with AppleTalk.

Modems, Cages, and Cards

Hooking up to the Internet via a 500's internal modem means crawling along at a maximum speed of 19.2 Kbps. If you simply must have more modem, you'll need to go on a hardware hunt. Seek out the elusive PCMCIA adapter cage, also known as a PC Card Cage. It fills one battery slot, which means you need only a single battery instead of two. Beware—it's a big-game hunt. We're talking white rhino, almost nonexistent. (If you've upgraded to PowerPC, the cage needs to be version C. Versions A and B both work with 68040 PowerBooks but not with PowerPC models.)



THE DEFAULT PowerBook SCSI ID is 2.

The Inner Sanctum

You don't have to be a certified technician to add RAM and modem cards yourself. RAM and internal modems all ship with instructions on how to pop off the keyboard and make the swap—a painless 15-minute operation.

Tweaking the other innards, however, can be a messy operation. If you're not comfortable with a screwdriver, hex wrench, and lots of painfully tiny parts, take your Mac to a repair shop for the tough stuff.

Case in point (and in case you're doing it yourself anyway): Below the screen, a curved piece of plastic wraps around the hinge and connectors. It's held in place by a row of practically microscopic plastic pins, and removing that piece without breaking those pins is no small task.

Fix-it Notice: If your screen wobbles every time you open your PowerBook, you may have a case of hingitis (inflammation of the hinges). The 500 series has hinge screws empowered with the ability to self-unscrew. They hold the case to the display, and the only fix is to open the case and tighten them. Failure to do so can mean some serious display problems—for example, a cracked screen—so if your display's flailing, have it checked. There's an excellent article on the topic by Joe Kudrna and Larry Bles at http://ogrady.com/articles/500hinge.stm.

Software

Any System software, from 7.5.1 through Mac OS 8.1, works great. The latest and greatest networking and communications software all works, too. Likewise with applications—as long as they're not PowerPC only, you're in.

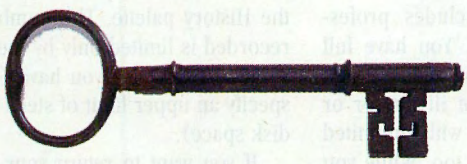
T. Kelley Boylan is a Mac administrator who owns and uses Macs exclusively.

We open doors...

(not windows)



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Photoshop 5.0

GRAPHICS & SOUND

COMPANY: Adobe Systems
CONTACT: 800-492-3623, http://www.adobe.com
PRICE: $649 (SRP), $199 upgrade from any earlier version
REQUIREMENTS: PowerPC, System 7.5.5 or later, 32MB of RAM, 60MB of free hard disk space. RECOMMENDED: G3, 64MB of RAM, 24-bit high-resolution graphics acceleration card

FREAKIN' AWESOME
The most valuable products, the coolest gizmos.

SPIFFY
A solid offering. Overall a good investment.

YEAH, WHATEVER
A few good features, but generally a waste of time and money.

BLECH!
We hate to even blotch our pages with the thing.

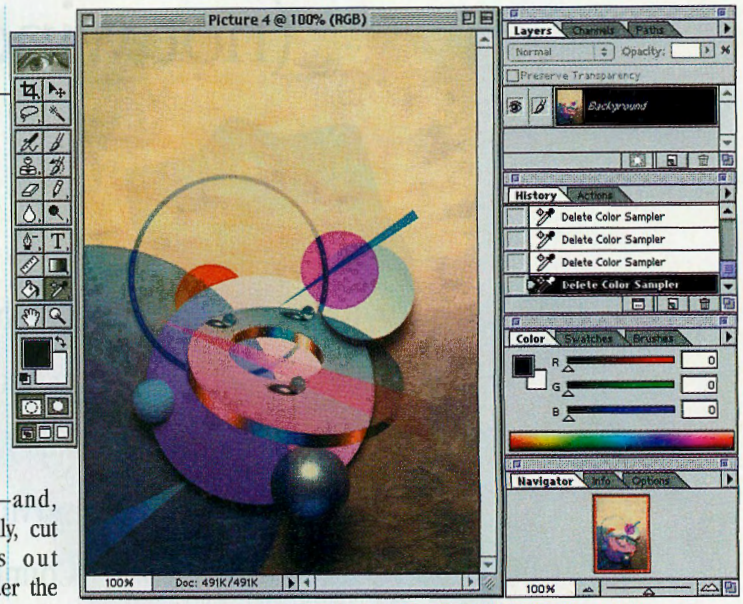


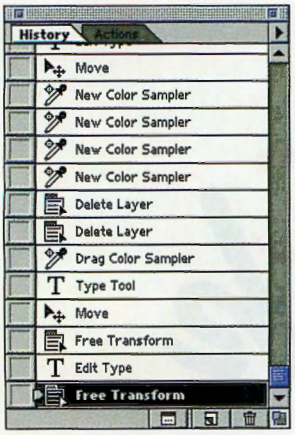
Image by David Bishop

THE LOOK OF PHOTOSHOP hasn't changed much in version 5.0, but excellent new features make this the best upgrade in years.

Total domination. That's what Adobe has long enjoyed with Photoshop, the market-crushing Godzilla of image-editing applications. Not only does every serious digital artist swear by it, it's the one pivotal application whose continued existence on the Mac is a life-or-death matter for Apple.

Unfortunately, unchallenged superiority can lead to complacency or even loss of direction, as Photoshop users discovered in the last upgrade. For all its good features (the Actions palette, for example), Photoshop 4 imposed bizarre changes that forced you to relearn important operations with no compensatory gain in productivity. Meanwhile, long-term weaknesses in the program went unaddressed.

We're glad to report that Adobe is back on track with the new upgrade. Photoshop 5.0 finally conquers two major shortcomings users have kvetched about for years: the awkward, limited text tool and the lack of multiple undos. Also included are a number of improvements that make this the most significant Photoshop upgrade since version 3—and, incidentally, cut the legs out from under the existing Photoshop plug-ins market.



USE THE NEW HISTORY PALETTE to revert to any previous stage of your work. If you haven't got enough scratch disk space to hold all those earlier versions, Photoshop simply forgets the oldest ones.

For example, Photoshop 5.0's great new type tool basically puts Extensis's PhotoTools plug-in out of business. All the complex type editing and formatting you used to do with PhotoTools, or by laborious selection work in Photoshop, you now can do with speed, power, and flexibility on the new type layer. This special layer (created when you choose the type tool from the tools palette and click anywhere in your document) tracks type and formatting info and lets you make changes to any aspect of type at any time—just double-click on the type to edit it.

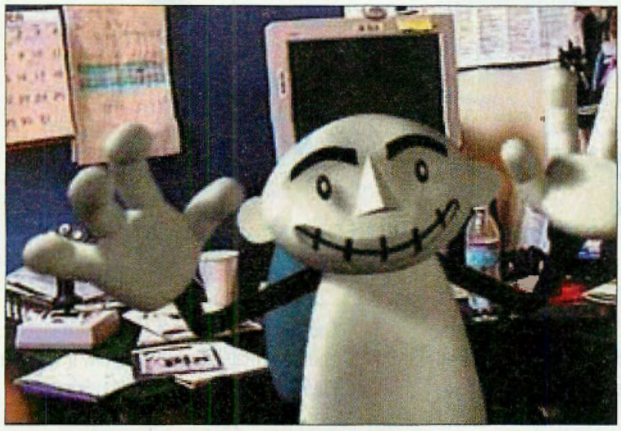
At last, Photoshop includes professional-level type handling. You have full control of tracking, kerning, leading, and baseline control, just as in Illustrator or PageMaker. You can play with unlimited fonts and styles in a layer, too. While you still have to enter and edit type in a dialog box (which is now a floater, not a modal dialog) instead of directly into your document, the document's type layer does show a preview of what's in the box. Moreover, you can reposition or apply effects such as drop shadows to the type layer in the document while the Type floater is open. When you edit the type, the effects update to reflect your edits.

The other major innovation in version 5.0 is the History palette. This industrial-strength approach to multiple undos provides almost unlimited options when you change your mind. It is by far the best implementation of the basic undo function that we've seen. Each operation you perform—from selection moving to brush strokes to filter options—is logged into the History palette. The number of steps recorded is limited only by the amount of scratch disk space you have (or you can specify an upper limit of steps to preserve disk space).

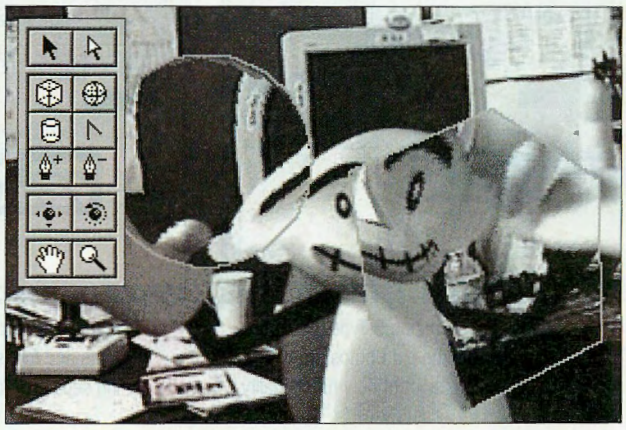
If you want to return your image to a previous state, open the History palette and click on the relevant line. A slider lets you move interactively through each stage—a very cool feature indeed. Once you've moved to an earlier stage in your work, you can make any necessary modifications and continue from there. (Note that you lose all the steps that come after this point.) The

Photoshop Does 3D, Sort Of

Photoshop 5.0's new 3D Translation plug-in lets you map your image on cubes, spheres, and cylinders. It's cute but quirky.



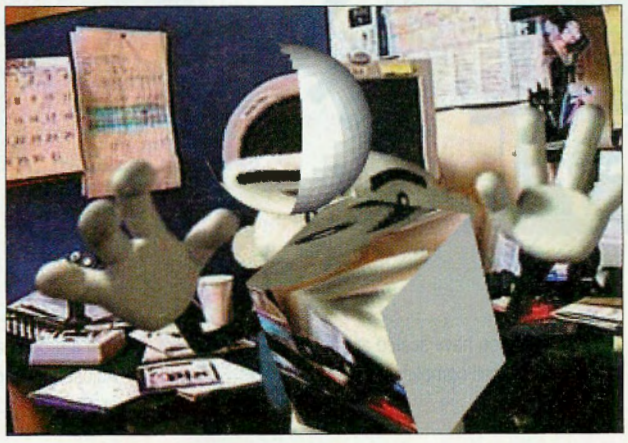
1 Start with any image—say, Max in his *MacAddict* cubicle.



2 Choose the 3D Transform plug-in from the Filters menu. The intuitive (though inexplicably black-and-white) interface lets you deform areas of the image with simple 3D shapes.



3 Placed against the original background, these objects simulate protrusion from the image. To rotate them, choose a rotate tool, then drag. Sorry, you can't rotate them in different directions.



4 Push it too far and you can see around the back. And gee, there's no surface-normal smoothing! Well, after all, this is Photoshop, not Lightwave.

History brush extends the power of the History palette, allowing you to paint earlier stages of your image into selected areas. It's like the Magic Eraser on steroids.

The addition of layers was the most important innovation in Photoshop 3. Photoshop 5.0 adds built-in layer effects that obviate the need for many third-party effects filters. From one effects box, you can control settings for drop shadows, inner shadows, outer glows, inner glows, and embossing. Once you apply them, these effects remain live, so any further work you do on the layer will display the effect, too. Moreover, you can set bevels and shadows to have the same light-source angle and color, so any changes you make to the lighting in one effect are applied globally. This will be a major time-saver for you pixel pushers doing drop shadows all day long.

Photoshop 5.0 adds new plug-ins, too. Most intriguing is the 3D Transform plug-in. This gives you the option of mapping your image on cubes, spheres, and cylinders, then moving and rotating those objects in 3D space. The idea is to allow realistic adjustments to the perspective of boxes and other geometrically simple objects in the image. Of course, this isn't real 3D, and if you try to rotate things too far you'll see around the back, which is just a featureless shape with no image map. It's only a first cut at what eventually ought to be a full-fledged effort at integrating 3D into Photoshop's 2D world. (While you're waiting for Adobe to get around to that, try Vertigo's Dizzy and 3D HotText plug-ins for 3D work in Photoshop.)

in review

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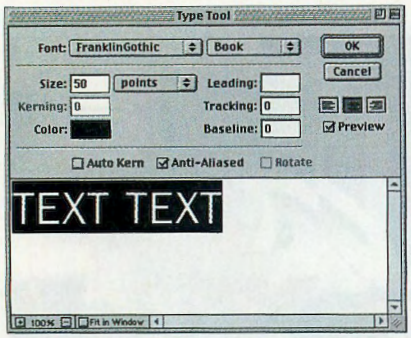
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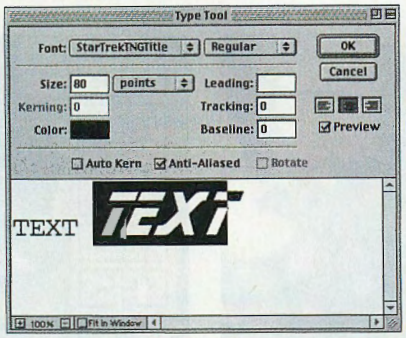
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Text Mastery at Last

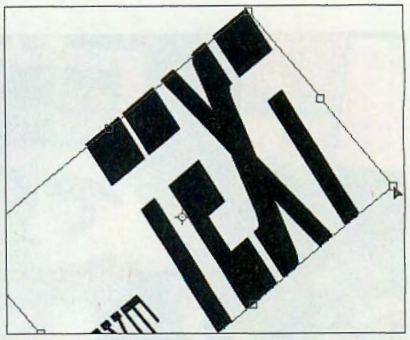
Photoshop's new Type tool is a massive improvement over the wussy, balky Text tool of the past. Here are a few of the tricks you can perform.



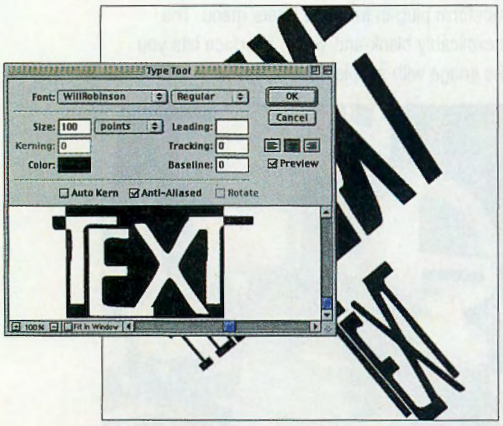
1 Initially, the Photoshop 5 Type tool looks very much like the old Photoshop 4 Text tool—but it has a lot of new functionality.



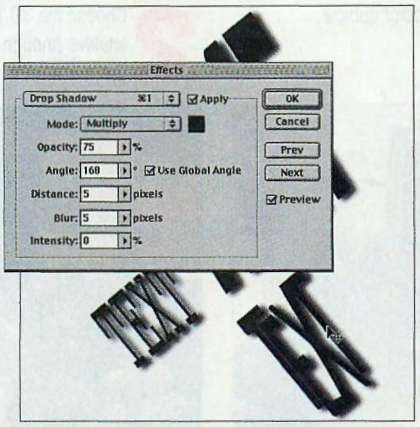
2 In the Type box, you can apply different fonts and font sizes, and change the leading separately on selected blocks of text.



3 Created text goes on a special text layer. You can rotate, scale, and skew it with the Free Transform tool and not lose quality.



4 After you have scaled and rotated it, the text is still completely editable.



5 Add a drop shadow effect to the layer. Adjust it interactively inside the window, or even with a dialog box up.



6 The text layer has been "frozen" to a normal pixel layer. You can now edit it with all of Photoshop's painting tools.

Automation plug-ins (located somewhat anomalously in the File menu) are a new plug-in type; they basically function as file-handling wizards. For example, the Batch command Automation plug-in handles batch processing better than the batch command in Photoshop 4's Action palette. The Contact Sheet command creates a contact sheet with thumbnails of all the images in a folder. While you can do the same things with Actions, Automation plug-ins generally work faster and provide more functionality (and, of course, you don't have to set up the Action yourself). Third parties can design new Automation plug-ins to perform any procedure addressable through the Automation plug-in API in the Photoshop 5.0 SDK (on the Photoshop disc). Expect to see third-party suites of Automations customized for the file needs of various vertical markets.

Minor updates to the Selection and Pen tools are mostly geared to edge detection, which Photoshop previously hasn't done well and with which it still has trouble. Trace along an edge between areas of high contrast with the new Magnetic Lasso or Magnetic Pen tool, and the selection line or path will snap to the edge. However, the Lasso or Pen will often miss the edge when there's little contrast or where colors are very close. Even when the contrast is high, the smoothing algorithms applied to the Lasso or path tend to make it shrink. We preferred the Magnetic Pen to the Magnetic Lasso, because it provided more editing control and better results.

You'll also notice a host of color-handling improvements. A multiple eyedropper lets you sample up to four color regions at once. The RGB or CMYK color info is reported in the Info palette. Color management has been beefed up with spot color channels, support for the International Color Consortium (ICC) CMS and the sRGB non-monitor color space, and a gamma control panel that other Adobe programs, including Illustrator, will share.

Now that Photoshop has eliminated its two major weaknesses, what worlds are left to conquer? The program still doesn't import 3DMFs or any other 3D model format, though you can do that with plug-ins. The option to work on a low-res proxy of big files, speeding your work and making efficient use of limited RAM, would be nice, too. But our vote is for a more sweeping innovation. We'd like to see Photoshop integrate the powers of the Actions and History palettes and the Automation plug-ins and go totally procedural, so that you can make any feature of the program interact modelessly with any other, perhaps via an AppleScript-compatible scripting language.

Until that high level of functionality is added, however—if it ever is—you're bound to be happy with Photoshop 5.0.
—Steve Anzovin and Raf Anzovin

GOOD NEWS: Super text handling. Multiple undos. More color management features. Snap-to-edge paths. Faster for some tasks. **BAD NEWS:** Needs more RAM and hard disk space than ever.

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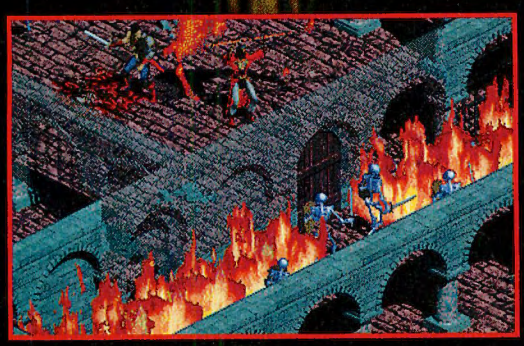
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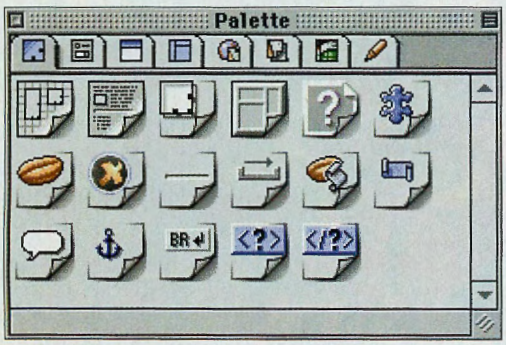
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GoLive CyberStudio 3.0

GRAPHICS & SOUND

COMPANY: GoLive Systems
CONTACT: 800-554-6638 or 650-463-1580, http://www.golive.com
PRICE: $299 (SRP)
REQUIREMENTS: PowerPC, System 8.0 or later, 16MB of free RAM (20MB recommended), 30MB of free hard disk space, CD-ROM drive

It's ironic that the company that brings us CyberStudio 3.0 is named GoLive, because we sure aren't going anywhere now that we're glued to our Macs, cranking out killer Web sites by the bucket. This massive upgrade adds a slew of features to this robust Web-publishing tool that meet most of the needs of Web pros.



IN THIS OBJECTS PALETTE, you can drag any number of elements into your Web page. These tabs include HTML basics, forms, header properties, frames, site elements, CyberStudio special functions (such as a handy date and time stamp), and a custom tab for your often-used elements.

GoLive has labeled this upgrade the Professional Edition for a reason. The manual totals a whopping 843 pages (including a WebObjects addendum); learning how to use all of CyberStudio's features isn't for the faint of heart. To complete even basic tasks, you need to become familiar with how this application works. CyberStudio presents many of its tools in palettes, which necessitates not only a huge monitor but also the ability to grasp the icon-driven process of building Web pages.

CyberStudio 3.0 offers three ways to create and edit Web pages: WYSIWYG layout mode, tag-outline mode, and regular text-source mode. GoLive has improved the source editor for those Luddites out there by supporting grep search and replace functions, HTML syntax and compatibility checking based on a number of different browsers, and line numbering.

The WYSIWYG layout editor has been enhanced as well. Finally you can select multiple objects. You can import tab-delimited ASCII files as tables. Object alignment is possible. And, thankfully, you can select multiple table cells and modify them as a group. One major enhancement is the inclusion of master objects, which allow you to edit the common elements of a site—say, a navigation bar—in one place and update them across the entire site. All these features have been high on user request lists since version 1.0, and we're delighted to see them in this upgrade.

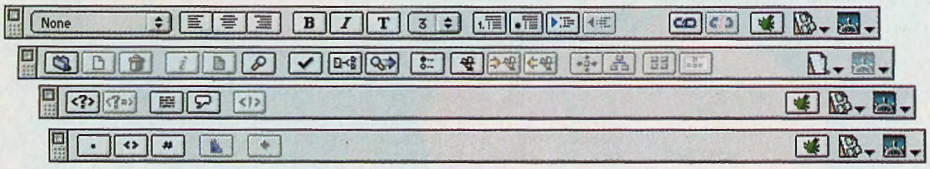
Now the fun begins: CyberStudio 3.0 allows Web designers to create and edit WYSIWYG Cascading Style Sheets and Dynamic HTML. These advanced features, which 4.0 browsers support, allow you to animate your pages and to control design elements such as placement and typography. While these features still do not enjoy universal support on the Web, CyberStudio helps you tackle the arcane scripting with a minimum of fuss. Premade JavaScript actions round out CyberStudio's advanced feature set.



LAYING OUT A TOP-QUALITY WEB SITE such as this one (chosen at random, really!) is a snap with CyberStudio 3.0.

GoLive has completely overhauled CyberStudio's site-management tools. Previous versions used a confusing system of aliases to files on the hard drive. This upgrade references your hard drive directly, so you can check links and view your site's hierarchy with ease. Version 3.0 also does away with the old Projects window. Instead, it places common elements of a site into the more sensible Site window. CyberStudio 30. also allows incremental page and site uploads to your servers.

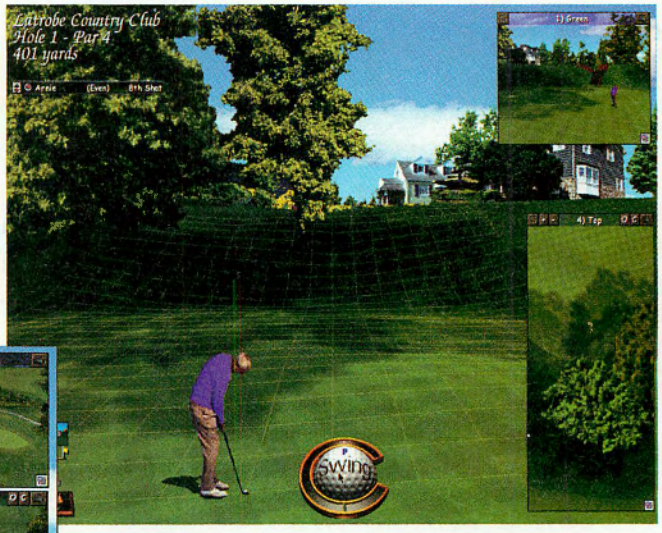
The 3.0 upgrade to GoLive's CyberStudio extends the original's powers significantly, improving on old features and adding new ones for today's Web technologies. While it's not the easiest tool to use, it is one of the most feature rich. Given the complexity of the Web as it exists today, designers will very likely rely on CyberStudio as a mainstay in their site-building processes.—*Scott Love*

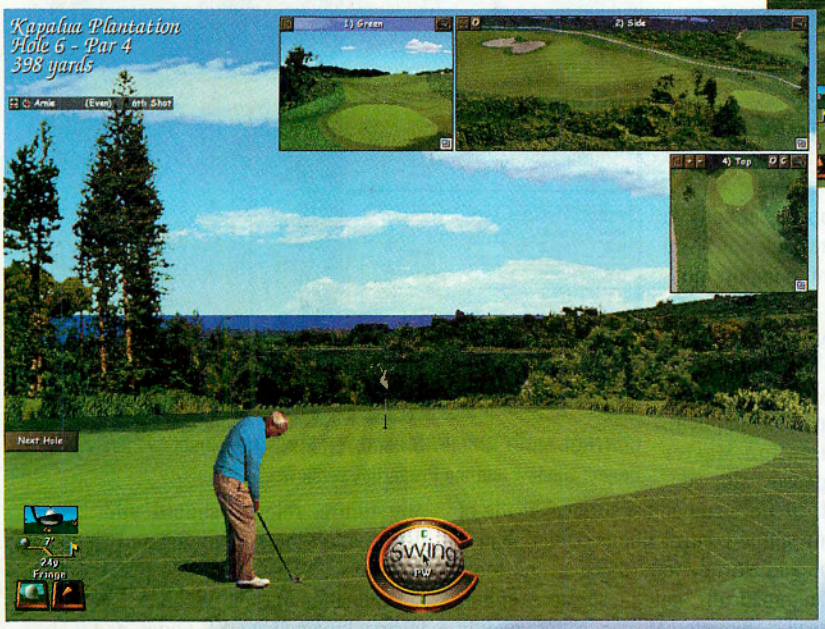


ONE OF THE BEST FEATURES in CyberStudio 3.0 is its context-sensitive toolbar. Change editing modes, and it changes with you. Select an object, and it makes a number of handy shortcuts available.

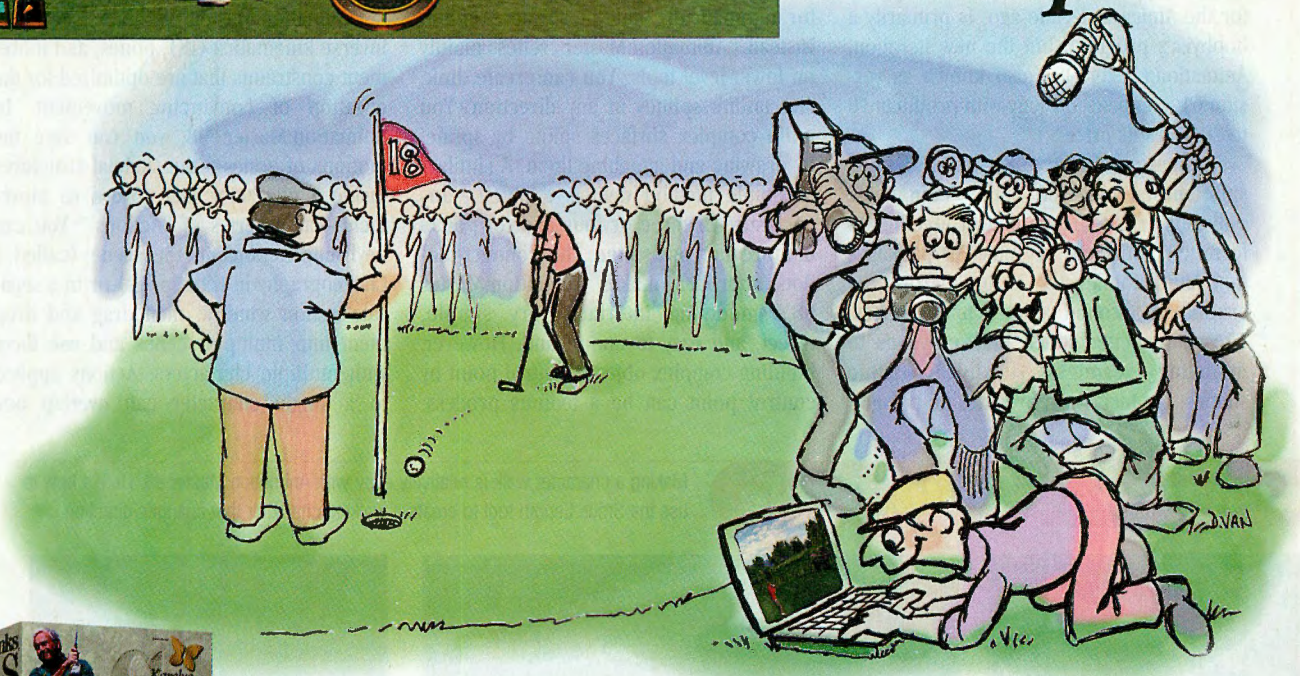
GOOD NEWS: Master pages. Grep searching. Easy-to-use JavaScripts. Dynamic HTML support and Cascading Style Sheets. **BAD NEWS:** The steep learning curve would qualify for an ESPN *Extreme Games* special.

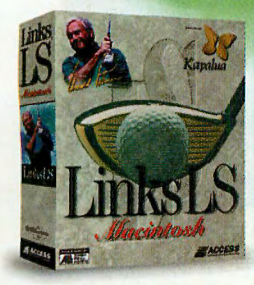
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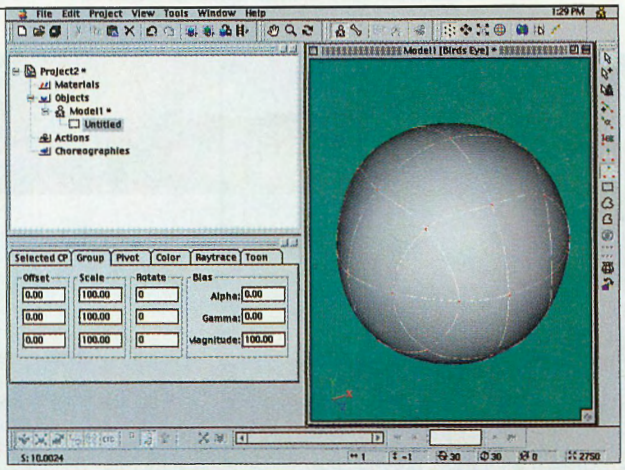
For information on this fine product, visit us on the web at www.accesssoftware.com/f8g or call 1-800-800-4880. And add some color to your life!

ACCESS SOFTWARE INCORPORATED

Animation:Master 98

GRAPHICS & SOUND

COMPANY: Hash
CONTACT: 360-750-0042, http://www.hash.com
PRICE: $199, network version $699
REQUIREMENTS: PowerPC Mac (G3 recommended), System 7.5 or later, 24MB of RAM (64MB recommended), QuickDraw 3D 1.5 or later



CONTROL MOST ANIMATION:MASTER FUNCTIONS from two floaters: the Project window and the Properties window.

In the field of computer graphics, the premier test of skill is character animation, the art of imbuing a 3D object with life and personality. Most 3D developers are scrambling to include at least a few relevant character animation features in their products, but all too often these are poorly thought-out tools tacked on to apps that were never designed to do the work.

Then there's Hash's Animation:Master, the only 3D app on the Mac expressly designed for character animation. Hash insists that Animation:Master, introduced for the Amiga a decade ago, is primarily a hobbyist's program, but the new iteration, Animation:Master 98 (also known as version 6), competes directly with products 10 to 20 times its price.

Animation:Master 98's pride is its spline-based modeler. Rather than using polygons (rigid shapes that fit together to form a 3D surface), as most 3D packages do, Animation:Master is built from the ground up around splines and patches. These are better suited than polygons to modeling seamless, flexible organic shapes. (In fact, Hash provides no polygon support at all, a drawback if you want to import models from other 3D programs.)

The power of Hash's spline modeler is its simplicity. Animation:Master dispenses with controls to move and adjust surfaces made of many spline control points. Other than a lathe and extrude tool, there are no tools for automatically building surfaces, either. Instead, Animation:Master relies mainly on lower-level tools. You can create, link, and unlink splines in any direction. You build complex surfaces spline by spline, by drawing and attaching them. A similarly simple method defines a patch—any enclosure of three or four control points of more than one spline. This connect-the-dots approach makes Animation:Master 98's modeling interface very simple, direct, and easy to understand. However, building complex objects control point by control point can be a tedious process. Any future release should add lattice deformation tools or lofting and skinning functions.

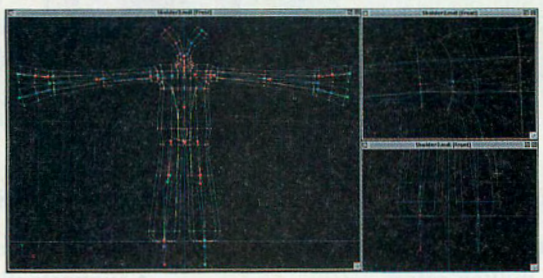
Animation:Master 98 boasts advanced inverse kinematics (IK), bones, and movement constraints that are optimized for the creation of convincing movement. In Animation:Master 98, you can save the motions of bones—the skeletal structures inside a character that govern its movement—as a series of "Actions." You can keyframe Actions in the scene (called a Choreography in Hashspeak) or in a separate Action window, then drag and drop them into multiple scenes and use them with multiple characters. Actions applied to a single character can overlap one

Animating a Walk Cycle

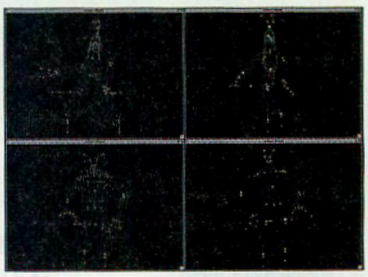
Making a character walk is relatively easy with Animation:Master 98. Here's how to use the Stride Length tool to create a walking character that changes direction.



1 This creature was modeled with tubelike joints that bend like rubber hoses. For this reason, not much detail was included in the elbow regions so that they would bend smoothly.



2 Give every joint a bone; complex joints may need two or more. Use Orient Like constraints blended together to orient middle joint bones directly between other joint bones, so that the joint doesn't buckle. Apply a Kinematic constraint to the foot bones to root them to the ground.



3 In an Action window, give the character a walk cycle—a loopable animation of the character walking in place. The program ships with various walk cycle Actions that you can use.

New Features in Version 6.1

Animation:Master version 6.1, in early beta at press time, will offer major enhancements over version 98.

Complete undo: Multiple undo works in all areas of the program, not just in modeling windows.

Five-point patches: This new patch type, placed at stress points such as underarms and elbows, eliminates creasing and buckling in models.

Hair particles: These render long strands of hair all over a surface.

Timeline: Displays time markers for the keyframes of all objects and allows you to edit their placement.

Sound integration: Direct sound import for timing.

Pose sliders: These blend together several poses of an object.

DXF import: Brings in polygonal DXFs and turns them into patch objects.

Radiosity: High-end, very realistic, and very slow rendering mode.

Cubic and cylindrical mapping: Standard texture-mapping geometries will save you from having to flatten objects.

another at different times, and control certain bones while different Actions control others. You could, for example, use a walking Action on the lower body of a character while animating an entirely new upper body animation.

The Action system makes possible a whole range of advanced abilities that other animation programs don't provide. Action Objects allow any object to temporarily become part of the bone structure of the character. Making stars fly around the head of a character who's just been bonked on the noggin is one typical use for this tool. Another Action feature, Stride Length, accomplishes nearly automatically what animators have slaved over since the dawn of computer animation—getting a character's feet to stick solidly to the ground as it walks. One Actions drawback: Actions created in a Choreography window can't be used elsewhere. You must use the Action window to create portable Actions.

Character animation programs live and die by their implementation of IK. This feature allows a whole chain of bones linked together to move and bend at one time, eliminating the necessity of bending each joint separately. Hash's implementation of IK is the only one we've used that approaches the ease of moving a puppet or armature in the real world—all the controls you need are included as handles on the surface of the bones. The IK engine effectively simulates the effect of moving and posing joints—pull on the wrist, and the elbow and shoulder follow. Pull on the elbow, and it moves while trying to keep the wrist in the same place. This function is ideal for making slight changes in the pose of a character.

Animation:Master 98 also has one of the best constraint systems—settings that limit an object's movement—in the business. Constraints can set a maximum degree of rotation along any axis (so that knees don't bend the wrong way) or constrain the object to the movement or orientation of other objects in complex ways. For example, the Orient Like constraint rotates an object or bone so that it points in the same direction as another one. You can use this constraint to keep a character's feet flat on the floor. Constraints also can work in between the bone structures of different objects, and you can animate the level of influence of a given constraint over time, blend and overlap constraints of the same type, and add animatable offsets to constraints. Similar features are available nowhere else on the Mac.

The process of applying surfaces to objects in Animation:Master 98 has some quirks. Most types of surfaces require a decal (image map). Applying decals is direct and simple. You just import the image, drag it around on the screen until it's exactly where you want it, then stamp it down. However, that's all you can do with it—you can't wrap the map around an object using various mapping geometries, as you can in most 3D programs. To get precise mapping control, you must "flatten" the object before applying the decal, which is difficult to do properly.

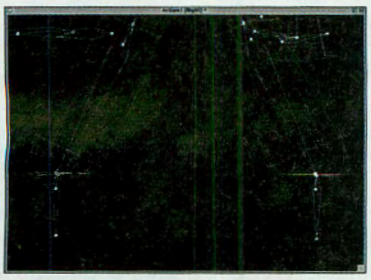
Rendering quality, a weak area in earlier Animation:Master versions, no longer disappoints. It now has high-end features such as motion blur, depth of field, and nonsquare pixels. The only feature seriously lacking is field rendering, which is crucial for compositing your animation with video in postproduction. Net rendering is available in the $699 network version of the program.

Unfortunately, the manual is not up to the rest of the program. It glosses over important topics with vague and elliptical language, then tries to clarify its statements with skimpy tutorials that may or may not answer your questions. Luckily, very good online FAQs and tutorials are available at Hash's Web site and at the 3D Ark site (www.3dark.com).

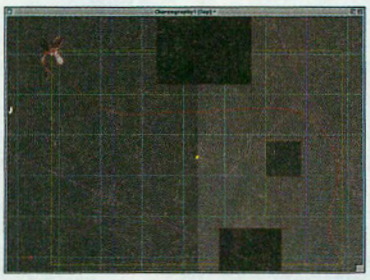
Animation:Master 98 is certainly not the software of choice for general-purpose modeling and the animation of flying logos. But if you want to create walking, talking, living, breathing 3D characters, there's simply no other program that comes close.—*Raf Anzovin*



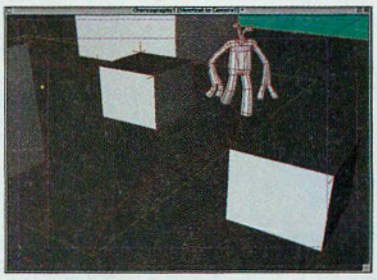
GOOD NEWS: Best app on the Mac for character animation. Advanced IK, bones, and constraints. Stride Length tool. Unique spline modeler. Low price. **BAD NEWS:** Undo does not work in all windows. Difficult to warp and deform large numbers of points. Actions created within Choreography windows are not reusable. Manual needs work.



4 Specify your character's Stride Length. This allows the character's moving feet to stick to the floor. Too long or too short a length may cause the character to "ice-skate" or seem to slip forward or backward as it walks.



5 In a Choreography window, set up a basic scene with the character. Using the path tool, draw a path for the character. Apply the new walk Action to the character; then apply a Path constraint to make it walk only on the path.



6 The character begins walking on one side of the scene, turns to avoid several objects in its path, and ends up on the other side.



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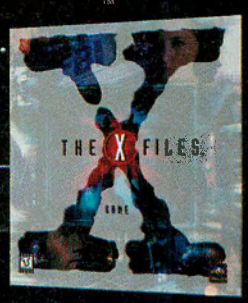
But beware, this game contains material that may be objectionable to some people.

Mainly, the folks at the FBI.

Windows® 95/Power Macintosh







reviews

Diablo

FUN & GAMES

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CONTACT: 800-953-7769 or 310-793-0600, http://www.blizzard.com
PRICE: $50 (SRP)
REQUIREMENTS: PowerPC, System 7.5 or later, 16MB of RAM (32MB recommended), 40MB of free hard disk space, 2X CD-ROM drive



YOUR ADVENTURE BEGINS in the center of Tristram. You talk to the few inhabitants, get some information and background, and buy and sell supplies.

FIND A DEMO of Diablo on The Disc.

Diablo has many of the features of a classic role-playing game, or RPG. So, before you start adventuring, the first order of business is to decide what type of character you will play. You have three choices: warrior, rogue, or sorcerer. The warrior can use just about any weapon. He is very strong and tough, but he lacks finesse. The rogue is the dexterous, stealthy type who can disarm traps and use a bow with deadly precision. She is neither as tough nor as strong as the warrior, however, and will be at a disadvantage in close combat. The sorcerer is the weakest of all the characters at the beginning of the game, but has the potential to become the most powerful of the three. His innate magical abilities allow him to learn spells quickly—especially those of great potency. The sorcerer is quite vulnerable in close combat, though, so be careful.



IT ISN'T TOO DIFFICULT to get in over your head in the dungeon. Be careful, or you'll be dead.

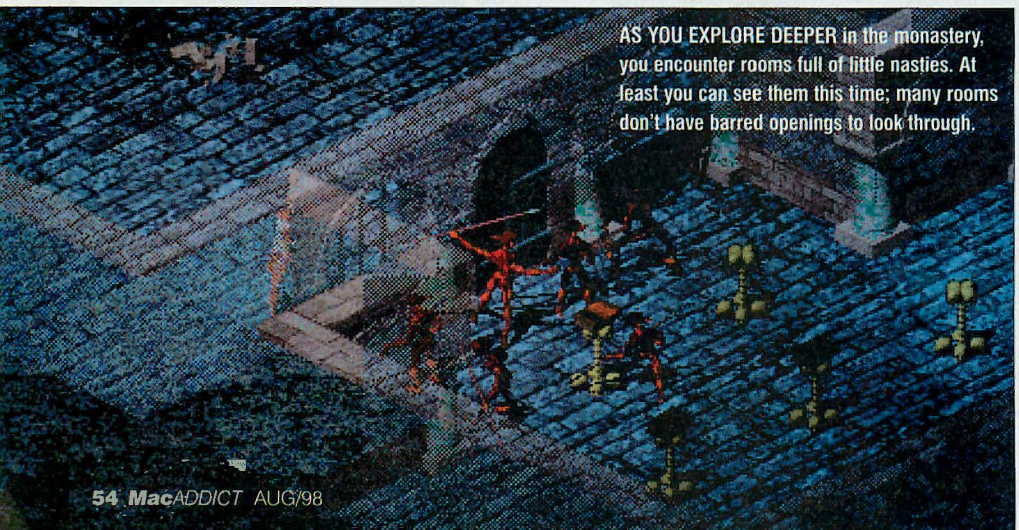
Once you have selected your character and given him or her a name, it's time to begin your quest. In single-player mode, you alone must stop Diablo from making evil reign supreme. The ancient monastery in Tristram, the medieval town in which the game takes place, has been overrun by Diablo and his evil minions. The once-prosperous town is quickly succumbing to this plague of diablerie. Like Dante in the *Inferno,* you must venture into the depths of the abysmal tunnels and catacombs beneath the desecrated monastery and destroy Diablo.

In Tristram, you can do most of the things you would expect to do in an RPG. You can buy and sell armor and weapons from the blacksmith; have the town's sage identify strange items; heal yourself; buy healing potions from the cleric, which you can use later; and exchange certain magical items with the town's witch. Interesting characters will occasionally ask you to perform a deed for them and reward you with something when you have completed your task.

Once you're outfitted with as much as your starting 100 pieces of gold will buy, you descend into the depths of the monastery. Gameplay proceeds in real time. As you walk around, monsters pop out and attack you, and you assail them as quickly as you can by clicking the mouse like crazy. You can also open chests, barrels, and sarcophagi to find goodies such as potions, scrolls, and weapons hidden inside. As you kill more demonic creatures and devilish acolytes and descend deeper into the labyrinth, your character will gain experience, which allows him or her to increase abilities. You will also begin to understand the sinister implications of what is really going on.

If you want to play with or against others, you can either use a local network or play over the Internet via Battle.net, Blizzard's online gaming service. Using one of these methods, you can play with up to four other people at once and either cooperate to defeat Diablo or compete and fight against each other. As in other networked games, this adds a unique and enthralling aspect to the game, because you are playing with real people instead of a computer.

The long-awaited Mac version of Diablo does not disappoint. Blizzard has combined the classic RPG style with real-time action and multiplayer networking to produce an addictive game with fantastic graphics and an absorbing plot.—*Wade Albright*



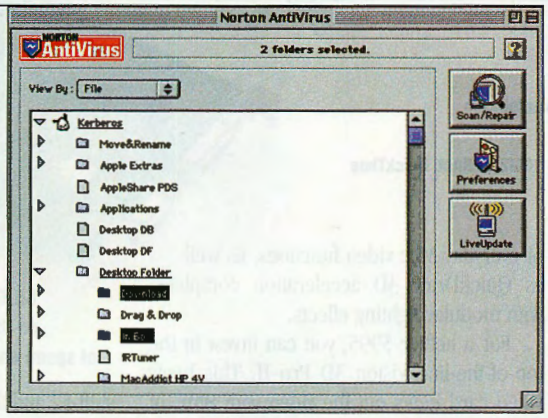
AS YOU EXPLORE DEEPER in the monastery, you encounter rooms full of little nasties. At least you can see them this time; many rooms don't have barred openings to look through.

GOOD NEWS: Addictive, absorbing single-player and multiplayer action. Awesome graphics and sound. Interesting plot. **BAD NEWS:** Blizzard took too long to come out with the Mac version.

Norton AntiVirus

DISK & FILE

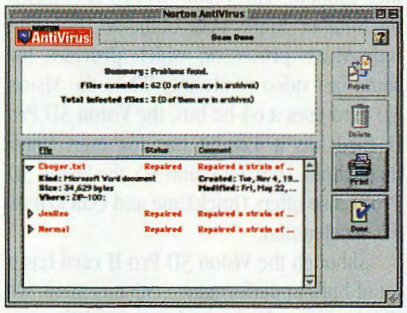
COMPANY: Symantec
CONTACT: 800-441-7234 or 541-334-6054, http://www.symantec.com
PRICE: $69 (street), $29 upgrade
REQUIREMENTS: 68040 or faster, System 7.5 or later, 8MB of RAM, 10MB of free hard disk space, Internet connection or modem required for LiveUpdate



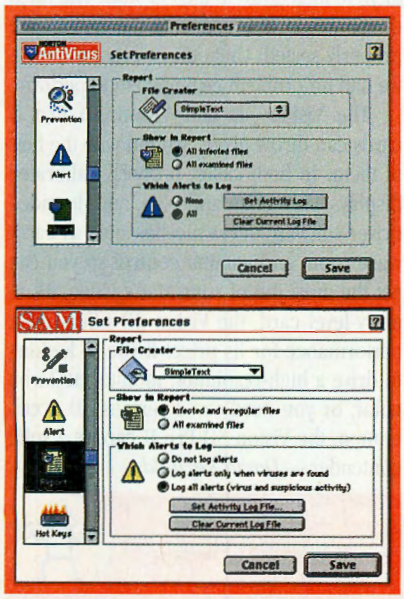
NEW NAME, NEW LOOK. The Norton AntiVirus makeover is a subtle improvement, as is the Scan/Repair consolidation.

Until the appearance of the AutoStart 9805 Worm a few months back, the Mac had gone almost three years without the emergence of a genuine virus. But in the interim, the plague of cross-platform macro viruses—primarily transmitted via Microsoft Word 6.0 and later—has become a full-fledged epidemic. In the latest release of the utility formerly known as Symantec Antivirus for Macintosh, Symantec has added a couple of feature tweaks that better address this threat.

To stay a step ahead of prolific macro virus authors, the newly rechristened Norton AntiVirus incorporates a heuristic "Bloodhound" system that promises to sniff out unidentified new macro viruses.



FRIENDLY DISCLOSURE TRIANGLES let you inspect the details of NAV's repairs.



THE PREFERENCES WINDOW in NAV (top) is now non-modal, and the controls and text have been nicely simplified from SAM (bottom).

Another more readily applied feature is a LiveUpdate button that connects to Symantec's servers via the Internet or a modem and checks for updated virus definitions. However, virus definition updates are no longer free; after the first year, you'll pay $3.95 a year for your subscription.

Norton AntiVirus now scans for and repairs viruses in a single step rather than two. The interface has been subtly made over to match Mac OS 8's Platinum appearance. The package includes a bootable CD-ROM, and you can designate your entire hard disk as a "SafeZone" where downloaded files will be examined for viral infection. In all, it's a modest update to a simple, effective utility.—*Mark Simmons*



GOOD NEWS: Nicer looking and slightly simplified. Preferences dialog is no longer modal. Effective virus protection. BAD NEWS: SAM was a cute acronym. LiveUpdate relies on your remembering to press the button.

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Vision 3D, Vision 3D Pro II

HARDWARE

COMPANY: Mactell
CONTACT: 888-622-8355 or 512-323-6000, http://www.mactell.com
PRICE: Vision 3D $145; Vision 3D Pro II $995 (SRP)
REQUIREMENTS: One free PCI slot, System 7.5.2 or later, 16MB of RAM, QuickTime 2.5 or later, QuickDraw 3D 1.0.6 or later



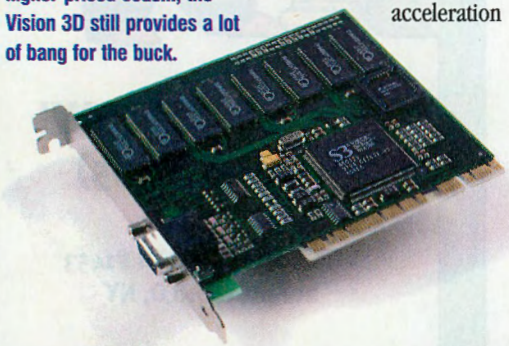
Photos by Aaron Lauer

VISION 3D PRO II
BIGGER IS BETTER: All those chips on the Vision 3D Pro II provide a lot of speed and deep, crisp color.

It was a big deal when the Mac went color. There was something about the switch from black lines on white fields to full, glorious 8-bit color that set the stage for digital media. The thing is, as color depth has increased and monitor sizes have grown, the amount of processing power it takes to throw that much data around has gotten steadily larger. The standard Macintosh video cards do a fine job, but they can be a little slow. The Mactell Vision 3D and Vision 3D Pro II cards, on the other hand, aim to provide snappy, crisp video for your Mac.

At only $145, the Vision 3D card gives you great video acceleration for the price. The 4MB of VRAM installed on this card allows 24-bit color at 1016 by 768 resolution or, alternatively, 8-bit color at 1280 by 1024 resolution—enough to drive a 21-inch monitor. Based on the S3 Virge chip, the Vision 3D card provides great acceleration of everyday Mac video functions, as well as QuickDraw 3D acceleration complete with modular lighting effects.

VISION 3D
ALTHOUGH SMALLER than its higher-priced cousin, the Vision 3D still provides a lot of bang for the buck.



For a heftier $995, you can invest in the top-of-the-line Vision 3D Pro II. This beefy video card kicks out the video with 8MB of VRAM for 24-bit color at resolutions as high as 1920 by 1080. Try reading that on a 17-inch monitor. The Vision 3D Pro II is based on Number Nine's state-of-the-art Ticket to Ride video processor, which provides for some fast video rendering. While the Vision 3D card uses a 64-bit bus, the Vision 3D Pro II card has a 128-bit bus for even faster throughput. Like the Vision 3D, the Vision 3D Pro II also offers QuickTime and QuickDraw 3D acceleration.

Although the Vision 3D Pro II card has a lot of built-in performance enhancement, we didn't see much of a performance difference between the two cards in day-to-day use, other than differences in resolution (and the contrast between 4MB and 8MB of VRAM is quite significant). In fact, our scroll test showed exactly the same performance by both cards—but this test examines only one kind of video acceleration. We didn't get much acceleration when viewing QuickTime movies, either. Both cards handled playback of a large movie file well, not dropping a frame even at double the frame size. When we ran a full-size playback at 1024 by 768, however, neither video card could handle full-motion playback of the movie.

The included video driver is a pretty nifty piece of software. It allows you to turn QuickDraw, QuickDraw 3D, and QuickTime acceleration on and off. It controls the size of the font cache, reserving some of the system memory for font display, which can significantly accelerate text display. The video driver also takes advantage of hardware-based video zooming. Just press shift-F2 and the monitor suddenly zooms to a 2X magnification. Shift-F1 returns the monitor to its regular 1X display—particularly useful for folks who need to see the detail in a graphics program but don't want to change the view's magnification setting. The driver also includes a screen saver, a set of start-up hot keys (which let you change monitor settings when booting), and control over the monitor's gamma settings.

Installation was a bit tricky for both of these cards. For some reason, neither card would seat properly when we inserted it and held it down with the anchor screw. To get the cards to seat properly, we had to leave them unanchored—a condition we don't recommend—and only then could we get them to lock down in the PCI slots. The video driver would not load until the cards were properly seated. Once they were in, though, we had no problem getting them to perform.

The Vision 3D and Vision 3D Pro II cards can throw pixels around with the best of them. In both cases, properly calibrated displays were crisp and cool, and the video driver software offers niceties such as hardware zoom and gamma control so you can get the most out of your Mac's video. As an entry-level card, the Vision 3D offers great performance for its price. If you're looking to drive a high-resolution monitor at 24-bit color, or you need some serious 3D acceleration, the Vision 3D Pro II card is a solid contender.—*David Reynolds*

SCROLL THROUGH 400-PAGE WORD DOCUMENT
The lower the time, the better the performance.

Vision 3D	27 seconds
Vision 3D Pro II	27 seconds
ATI XClaim VR	32 seconds
9600/233*	3 min., 29 sec.

* Standard video card.



GOOD NEWS: Good acceleration of basic video functions. Great performance for the price. Crisp, clear display. BAD NEWS: Some problems getting card to seat properly. Video and QuickTime acceleration not as high as expected.

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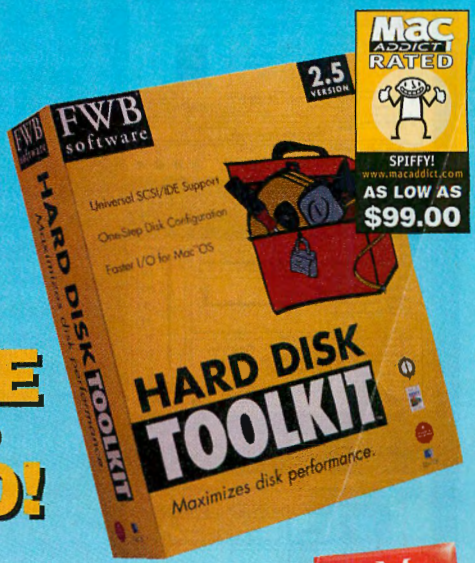
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HyperCard 2.4

DEVELOPMENT

COMPANY: Apple Computer
CONTACT: 408-996-1010, http://www.apple.com/hypercard
PRICE: $99; free upgrade for owners of HyperCard 2.3 or 2.3.5
REQUIREMENTS: Any Mac (68020 or faster recommended); 8MB of RAM (16MB recommended); System 6.0.5 (System 7.1 or later recommended); QuickTime 2.5 (QuickTime 3.0 recommended)



HYPERCARD STILL HAS that 1987 look, but version 2.4 taps QuickTime's hidden power.

FIND THE UPDATER on The Disc.

Like a graying radical from the sixties, HyperCard has been living in the past for quite some time now. More than two years have passed since Apple last upgraded its once-revolutionary but now creaky-in-the-joints multimedia authoring application, and that was a mere shuffle from version 2.3 to version 2.3.5. Most of us die-hard stackers frankly had given up hope for the old gent and expected any day to read that he had quietly passed away.

HyperCard 2.4, available on Apple's Web site as an updater for versions 2.3 and 2.3.5, actually breathes life into the old fellow.

What's new in HyperCard 2.4 is mainly QuickTime. Previously, you could play movies in HyperCard using QuickTime Tools, but now the native vocabulary of HyperTalk (HyperCard's scripting language) incorporates a large number of new QuickTime-related commands, properties, and messages. These functions give you unprecedented control over every aspect of QuickTime, including features you probably didn't know about, and for the first time allow movies to be interactive.

The new Movie XCMD allows you to address the properties of each QuickTime track type and use them to perform tasks with your HyperTalk handlers. You can play with sprites, frame rates, track order, sound volume, and so on. For example, to adjust the volume of a movie to maximum, you use the command "set soundVolume of audio track 1 of movie 'My Movie' to 100." What you generally can't do is change the content of a movie track. So although you can search for, extract, and jump to the text of a QuickTime text track, you can't modify the text itself. Do that in MoviePlayer or another QuickTime editor.

HyperCard 2.4 also contains the first complete implementation of a command language for QuickTime VR. From within HyperTalk, you can specify VR nodes by their unique IDs, change to a custom cursor when the mouse passes over a hot spot, and move among multiple nodes even if the creator of the VR movie didn't link them.

HyperCard 2.4 is not Web-ready out of the box (you need Web server software and Royal Software's LiveCard to publish your stacks on the Internet), but you now can use a HyperTalk command to open an URL with your default Web browser. For example, you can set up a button action to link directly to a Web page related to the material on a card.

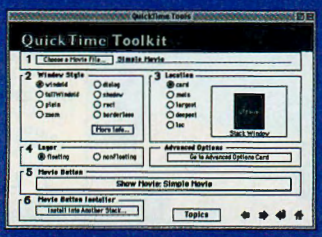
Apple has made some welcome improvements to the script window but failed to address such problems as the program's inability to view and change the properties of more than one object at a time, its excessively modal structure, and the tiny field capacity (still only 32K!). Not to mention that HyperCard still lacks built-in color support, antialiased text, built-in text replacement, forward deleting in text fields, a database-style list view—and there's not even a Windows player for stacks.

Can you do serious work in HyperCard? Absolutely. I use it every day to manage several large reference book and directory projects. And QuickTime or QuickTimeVR creators definitely should add HyperCard 2.4 to their arsenals. Nonetheless, the program is in desperate need of a major upgrade that addresses its long-standing shortcomings.—*Steven Anzovin*

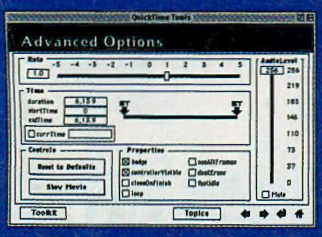
GOOD NEWS: Finally integrated with QuickTime and the Web. Retains HyperCard's retro charm. **BAD NEWS:** Retains HyperCard's retro charm. Not a major upgrade.

Customize a Movie Without Scripting

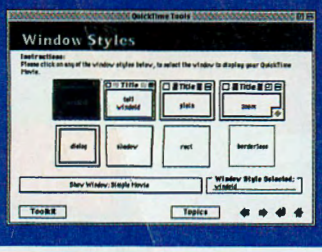
If you want to get the most out of HyperCard 2.4's QuickTime wizardry, you've got to learn HyperTalk scripting. Luckily, Apple took pity on you and included some cards that let you play with QuickTime's features first. Once you've got a sense of what the various options do, press the shift key while choosing Card Info from the Object menu to see the card script. It's all in there. Other cards in the QuickTime Tools stack provide a complete description of all QuickTime-related commands, functions, properties, and messages.



GO TO THE QUICKTIME TOOLKIT in the QuickTime Tools stack that comes with the updater. Here you can choose a movie, set the window type, and play the movie by pressing a button.



START YOUR MOVIE at a specific point in time, set playback rate, ramp up the audio, and do obscure things such as set the badge (a little icon you can put in the lower left of the movie window).



EVER WONDER WHAT the different Mac OS 8 window types are called? Apply any of these to your movie, and deal with the consequences—hey, where's the close widget?!

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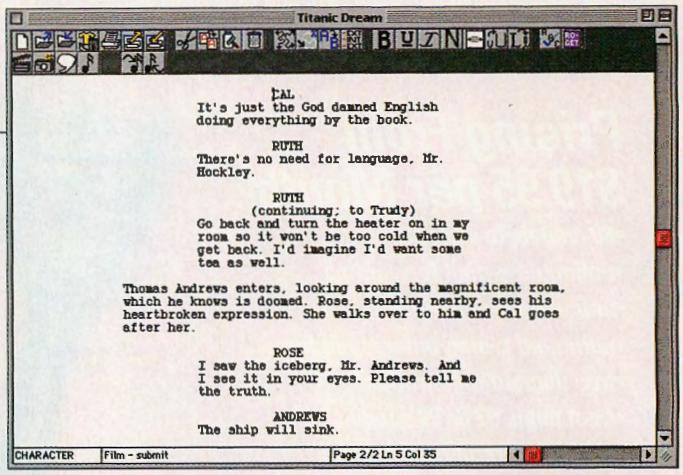
COMPANY: Cinovation
CONTACT: 800-788-7090, http://www.scriptware.com
PRICE: $299.95 (SRP)
REQUIREMENTS: 33MHz 68030 or faster, System 7.1 or later, 8MB of RAM, 10MB of free hard disk space, CD-ROM drive

FIND A DEMO of Scriptware on The Disc.

What do *The X-Files, King of the Hill, Leaving Las Vegas,* and *Ace Ventura* have in common? Their scripts were all created in Cinovation's Scriptware. Long a Windows product, Scriptware is now available for the scriptwriting Mac user.

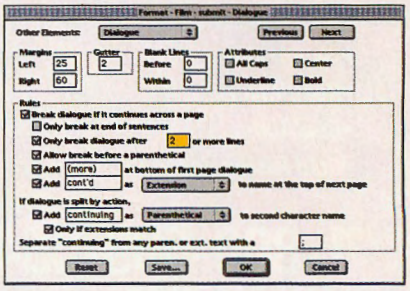
Scriptware is a word processor that specializes in, not surprisingly, script creation. The manual is a great guide and introduces even the most novice Mac user to the application with great efficiency—and the occasional potshot at Windows users. Set up in tutorial form, the manual leads you through several lessons that quickly show you Scriptware's major capabilities.

Once you get beyond the basics, Scriptware's power becomes evident. The product is completely customizable. The easy-to-use default settings make scriptwriting a snap, but should you need to change those settings it's nice to know you can—you don't have to write the way Scriptware wants you to write.



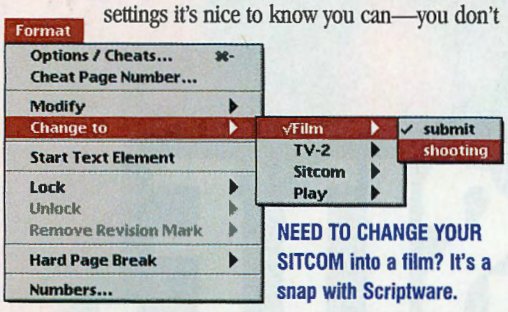
HOLLYWOOD OR BUST! Scriptware is the scriptwriter's word processor. The simple interface disguises a powerful tool for creating scripts.

Scriptware uses a *tab-return* system. For example, to begin character dialogue, you press the tab key and type the first few letters of the character's name, and Scriptware autocompletes the name for you—it appears in a pop-up window. Just press return to accept the highlighted name, and then start typing; the program formats your dialogue for you. By default, shift-return starts a new scene, and option-return starts a new shot. Tabbing allows you to enter camera instructions (pan to, fade to, and so on), among other things. Scriptware features a fully customizable set of scene-time features, including day, dusk, and sunset. Shots, also fully customizable, include Camera On and P.O.V. Plus, Scriptware plays housemaid as you type, automatically capitalizing the first word in each sentence and all stand-alone and contracted forms of "I"—a feature that will save you the trouble of using that pesky shift key so often.

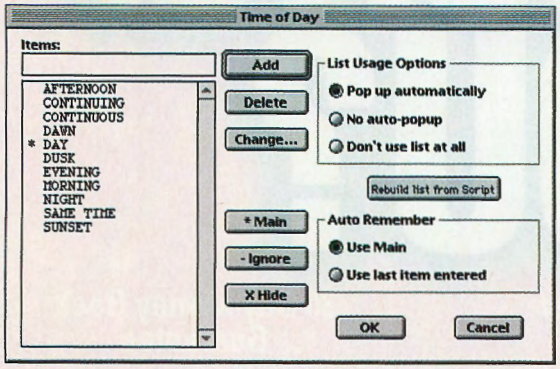


SCRIPTWARE IS completely customizable.

Scriptware also offers powerful tools for modifying an existing script. For example, if you've typed a script intended for sitcom use, you can change the entire script to film formatting with one menu selection. Scene Cards allow you to move scenes as easily as you would shuffle a deck of cards. All in all, the organization and modification tools are phenomenal.



NEED TO CHANGE YOUR SITCOM into a film? It's a snap with Scriptware.



YOU CAN EASILY CONFIGURE Scriptware's actions and interface.

Users will discover some other useful features when they get further into the application. A Notes feature comes in handy for organizing your thoughts or communicating with the producer. You can also use Notes in jump commands, such as "Jump to next note," and even hide them from view. If dialogue continues across two pages, Scriptware automatically places the character name and the word *(continued)* at the top of the following page. Reformatting the script reformats every page break almost instantaneously.

Importing scripts from your favorite word-processing application is not as easy as it could be. Scriptware allows you to import text files; if this is successful, your script acts like any other Scriptware document. If your original document does not follow conventional scriptwriting guidelines, importing the file results in a virtually unusable document.

Scriptware's biggest flaw is the way it handles standard text procedures. Shift-clicking does not select blocks of text—you must click-drag to select text. Adapting to these quirks won't kill you, but you shouldn't have to adapt in the first place.

Whether you need to write a script for Hollywood or for Hollywood Hills High School, Scriptware will star in the leading role.—*Erik J. Barzeski*

GOOD NEWS: Fast learning curve. Completely customizable. Cross-platform support. **BAD NEWS:** A tad pricey. Ugly buttons.

DEER HUNTER™

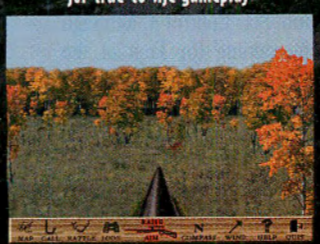
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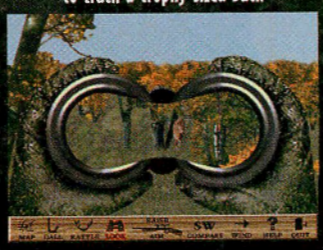
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REQUIREMENTS: PowerPC, System 7.5.3 or later, 12MB of RAM, 64MB of free hard disk space for standard install (5MB for minimum install), CD-ROM drive



HONE DIPLOMATIC SKILLS in conversations with aliens such as the Daktaklakpak to fulfill your mission.

Star this, star that. Given the abundance of real-time strategy games that take place in a sci-fi setting, a new offering doesn't exactly raise eyebrows. What does Star Control 3 have that other titles in the spaceploitation genre don't? Star Control 3, the third installment in the series, builds on a complex history of events in a multiracial galaxy where there is no shortage of political conflicts and intrigue.

In this adventure, a mysterious force seems responsible for the collapse of Hyper Space travel—the destruction of which threatens all sentient life. As a captain in the League of Sentient Races, your mission is twofold: explore the unknown Kessari Quadrant—all League ships, colonies, and resources are under your command—and rescue sentient life from an untimely demise.

In your first contact with the game, the interface and graphics look odd and outdated. Star Control 3, a direct port from the PC, harks back to 1996 when Accolade first published it, which explains both the old graphics and the Mac-agnostic interface. In any case, once you get your bearings and proceed to gameplay, aesthetic concerns fall away. Star Control 3's most compelling quality is the fusion of diplomatic interaction and the quest for survival.

Most of your game advances in animated tête-à-têtes with alien races, old friends, and new enemies. Behavior, sense of humor, speech, and intelligence characterize individual species. The cinematic scenes feature Claymation instead of full-motion video, and wonderful voice talent brings the characters to life, resulting in a high degree of expression and fluidity. During these diplomatic exchanges, you read a discussant's mood from visual clues. When you miss a plot twist, you can invoke the ICOM, a Hal 9000 look-alike, which provides useful information.

The execution of the action and strategic components is less brilliant. Blending too many elements produced a mishmash of interfaces. For example, 3D gameplay has mixed results. The rotating 3D star map—present in the original Star Control—tries to depict space realistically, but its rotation sometimes obscures unlabeled stars. In the 2D map, the calculation of distances between stars is complicated. The battle scenes, labeled "Hyper Melee," occur in isometric view—you can't move in three dimensions.

Furthermore, though the box says "Explore. Manage. Conquer," you don't spend a lot of time building or managing your empire of League worlds. The complexity extant elsewhere in Star Control 3 is missing in the tacked-on colony management. In the colony screen, you have only two architectural styles. You don't manage your colonies from a central control; you must travel to a planet to modify the sliders, which regulate resources. It's laissez-faire—establish one colony for each species in the League, produce some colonial modules, then balance them to build fuel and ships. On the other hand, less management translates into more exploration of the quadrant and more interaction with characters on your quest.

Star Control 3 has a multiplayer mode; it's limited to Hyper Melee. Fight friends on the same keyboard, or over a modem, serial, or network connection. Star Control 3, although dated, proves entertaining for fans of the series or gamesters who like interactive adventures without total strategic conquest. Sometimes less is more.—*Jennifer Ho*

Save the Galaxy

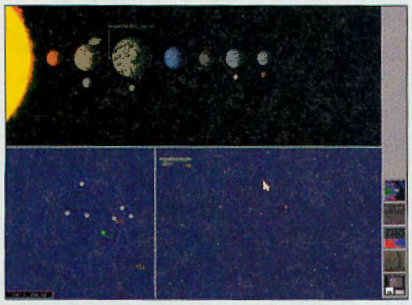
Stuck? Check the ICOM for clues you may have overlooked.

Turncoat League members? Talk some reason into wayward Crux races.

Ships and fuel are basic resources. Don't run out of either.

Use the variety offered by 25 ships to your advantage and to keep the action interesting.

Size up enemy ships before combat and choose a ship to match their strengths and weaknesses.



THE SYSTEM VIEW helps you navigate from planet to planet on your search for artifacts and allies.



IN HYPER MELEE you must face the enemy to find new information for your quest.

GOOD NEWS: Highly interactive diplomacy with 24 different species. Detailed plot and quality narratives. Cool voices. Online help. BAD NEWS: Has an interface only a mother could love. Outdated graphics.

Completely original engine, ruthless AI, hyper-realistic environmental effects, portals, and an endless multiplayer universe of user-created, hot-linked levels...welcome to the Bermuda Triangle of the galaxy

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reviews

Stylus Photo EX

HARDWARE

COMPANY: Epson
CONTACT: 800-463-7766 or 310-782-2600, http://www.epson.com
PRICE: $499 (SRP)
REQUIREMENTS: 68020 or faster, System 7.1 or later, 16MB of RAM, 50MB of free hard disk space, standard Apple serial cable

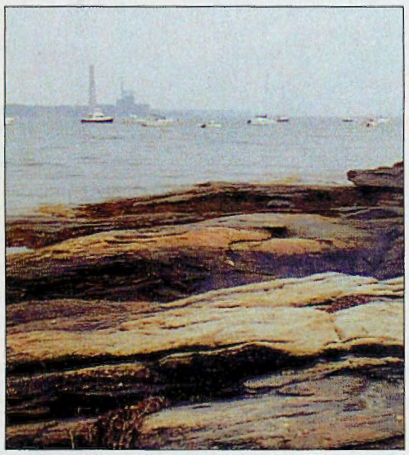


Photo by Aaron Lauer

IT'S SLEEK, STYLISH, and its print quality will amaze all who see it—especially given its price.

It's tough to get excited about an ink-jet printer. After all, there's not much new about printing color images using several colors of ink, and color ink-jet printers have been around for awhile. The reason the Epson Stylus Photo EX gets our drool a-flowin' is its combination of print quality and price. For about $500, this printer can produce photo-realistic printouts at sizes ranging from the standard 3-by-5-inch print to 11.7-by-44-inch panoramas.

The Photo EX performs its magic with a combination of 1440-by-720-dpi resolution, a six-color printing process, and Micro Piezo printhead technology (which gives the printer tremendous control over the size and shape of individual ink dots). When it prints high-resolution photos on glossy film paper, the result looks almost as if it had come from a photo lab—the resolution is fine enough so the graininess of the film starts to show through, large areas of similar colors have almost continuous tones, and lines are crisp and sharp. The motion of the printhead causes minor horizontal banding, but it isn't noticable except on close examination.



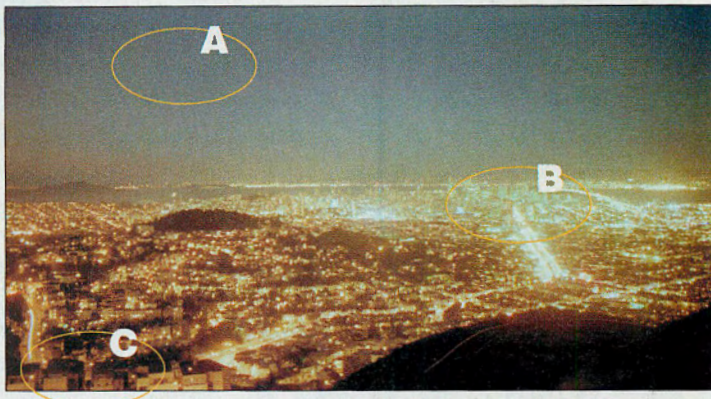
ALTHOUGH THE QUALITY of this photo (shot with a digital camera) isn't quite up to the level of a film-based image, the Photo EX does a remarkable job of making the best-possible print of it.

The print quality depends on the kind of paper used. The finest print quality is available with glossy film paper, which is also the most expensive option—a little over $1.80 per letter-size sheet. High-quality ink-jet paper is significantly cheaper at around 12 cents per 8.5-by-11-inch sheet, so save that glossy film for the best photos. After all, the regular ink-jet paper takes a pretty good image. You might also want to spring for the 11-by-22-inch panoramic glossy film paper, which runs about $1.70 a sheet.

While the Photo EX wouldn't win a page-per-minute race with a laser printer, it isn't deathly slow, either. Printing an 8-by-10-inch image on the high-quality setting takes just under 5 minutes. Printing black text is also reasonably fast. We were able to get a couple of text pages per minute from the printer.

One other nifty feature of the Photo EX is its connectivity with the Epson Photo PC 600 digital camera. By connecting a Photo PC 600 to the Photo EX, you can print 4-by-6-inch images directly from the camera. The quality of these images, while it won't knock point-and-shoot cameras out of the consumer market, is remarkably good, and certainly acceptable for snapshots.

The Photo EX has its faults. To connect the Photo EX when you get it home, you'll need to buy a Mac eight-pin serial cable. And while the Photo EX ships with a good starter software bundle—including Photoshop 4.0LE, Extensis Portfolio, and Spin Panorama—installing the software requires either using the Digital PhotoLab application or digging around on the CD-ROM until you find the installers. Also, there seems to be a conflict with FileMaker 3. and the printer. FileMaker 4.0 works fine, though.



THIS LONG-EXPOSURE NIGHTTIME SHOT of San Francisco shows some of the Stylus Photo EX's strengths and weaknesses. The image was scanned directly from a 35-millimeter negative.
A: The gradual color changes in the night sky show off the Photo EX's handling of continuous tones. Note the hint of grain from the negative that shows in the image.
B: Individual cyan dots appear in the blown-out areas, one of the only places where the dot pattern is readily visible.
C: Straight lines appear fairly crisp, given the muted lighting in the shot.

The Stylus Photo EX is a great printer if you print a lot of bitmapped images—especially, as the name implies, photographs. It's inexpensive, quiet, and has very high print quality.—*David Reynolds*

GOOD NEWS: Amazing print quality for a low price. Printer is quiet. Ability to print directly from Epson PhotoPC 600 camera. Decent software bundle. Level 2 PostScript upgrade available.
BAD NEWS: No bundled serial cable. Installing bundled software is needlessly difficult.

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reviews

That's Infotainment

Encyclopædia Britannica Profiles: Black History

COMPANY: Encyclopædia Britannica
CONTACT: 800-747-8503, http://www.eb.com
PRICE: $29.95 (SRP)
REQUIREMENTS: Mac IIci or faster, System 7.1 or later (System 7.5 or later recommended), 8MB of RAM, 10MB of free hard disk space, 2X CD-ROM drive



BRITANNICA'S BLACK HISTORY disc sports all the modern HTML features, from graphics to sound and movies.

This CD-ROM reference employs the thus far unique shtick of using a Web browser as a front end. This time around, the HTML work is much better—it has graphics, for starters—and the text is more substantial, so we'll give Britannica credit for refining the formula to the point that it's a viable alternative to the ubiquitous Macromedia Director front end.

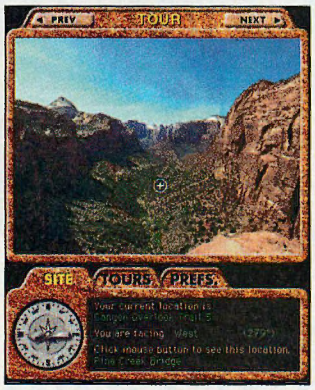
Still, the actual contents of the disc disappoint. Setting out to focus on African American history, with time lines and in-depth essays on major events and notable figures, this CD-ROM is more remarkable for its omissions than its inclusions. Although slavery, the Civil War, and the civil rights movement are extensively documented, the material gets mighty sketchy over the last generation.

Meanwhile, the coverage is heavily slanted toward sports and literature. We get a detailed biography of Tiger Woods—and even Mike Tyson's recent ear-biting escapade is deemed worthy of inclusion—but rap music, Spike Lee, and George Clinton don't exist. The Million Man March and the whole Rodney King controversy get a sentence each, but author Cornel West warrants an entire essay for *writing* about the Los Angeles riots. Sure, Nat Turner is probably a more significant historical figure than Tina Turner, but the arbitrary nature of the post-sixties coverage is even more distressing than its scantiness.

For historical matters, the disc should serve as a decent reference. The biographical features are chock-full of detail, and the coverage of yesteryear's controversies (for example, the outrageous Tuskegee syphilis study) is quite good. The inclusion of memorable video and audio clips is a gratifying bonus, but we wish there were more than a half-dozen of each.—*Mark Simmons*

Nature's Legacy: Zion National Park

COMPANY: Paintbrush Productions
CONTACT: 435-628-1104, http://www.pbproductions.com
PRICE: $39.95 (SRP)
REQUIREMENTS: 68040: 33MHz or faster; PowerPC: 80MHz or faster; System 7.0 or later, 16MB of RAM, 4X CD-ROM drive, 13-inch monitor capable of thousands of colors



This virtual tour of Utah's famed national park is a good example of how the oft-maligned virtual reality technology can create multimedia magic, letting you pan, scan, and click your way through the scenic vistas from the comfort of your desktop. It's not a substitute for actually going, but just think of the tour-planning benefits.

A couple of touches ease the problematic QuickTime VR navigation. To your left, a park map shows your current location and allows you to teleport between locations, while the captions beneath the panoramas tell you where a given hot spot will actually take you (much better than click and guess). Should you weary of aimless ambling, you also can step through major landmarks in a prefab tour. Each scene is accompanied by a paragraph or two of educational text. Appendixes on the park's wildlife, geography, ecology, and history make sure that you get your full U.S. RDA of informational goodness.—*Mark Simmons*

OceanLife Volume 6: Eastern Pacific

COMPANY: Sumeria
CONTACT: 415-904-0800, http://www.sumeria.com
PRICE: $49.95 (SRP)
REQUIREMENTS: 68040 or faster, System 7.0 or later, 8MB of free RAM, 4X CD-ROM drive, 640-by-480-pixel monitor with thousands of colors or better

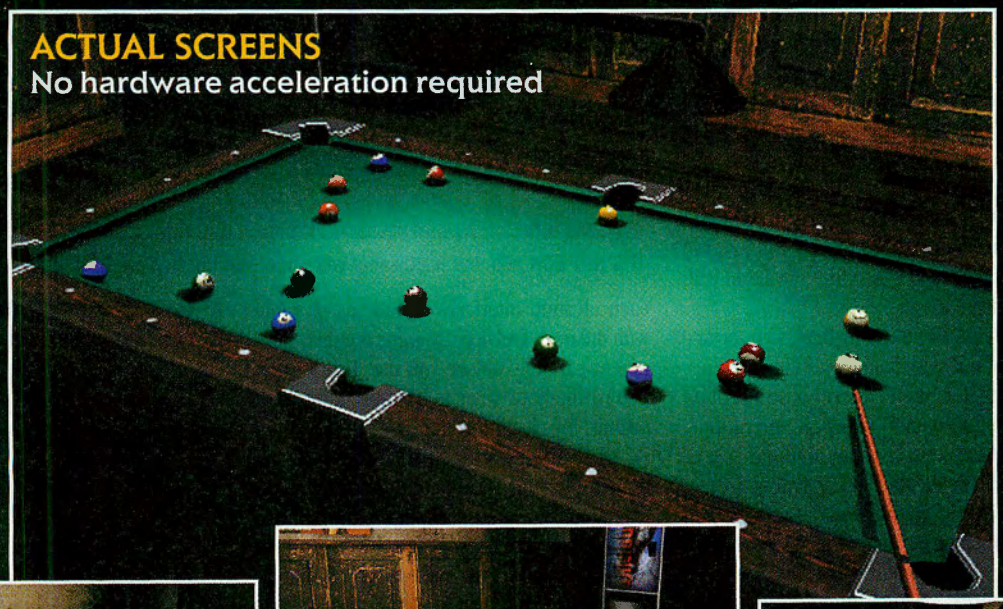


We've already reviewed a couple of earlier volumes in the OceanLife series—most recently in July of last year—and the basic format hasn't changed. Each disc delivers an hour of underwater video footage, chronicling the captivating cavorting of undersea denizens from skates to sea cucumbers, plus a slew of large and luscious still photos. Soothing voice-overs and movie clips accompany a catalog of submarine beasties, and for each featured location, you get a map, a selection of scenic photos, and a guide to especially notable diving spots.

This edition, focusing on the eastern section of the volcanic Ring of Fire that surrounds the Pacific, offers in-depth features on three island clusters. The treatment of the famed Galapagos Islands is disappointing: The disc gives only perfunctory coverage to star attractions such as the marine iguana, the giant land tortoise, and the lovable blue-footed booby. Fortunately, Costa Rica's Cocos Islands are a better fit, and the footage of the mighty rays of the Revillagigedo Islands is frankly an awesome sight.—*Mark Simmons*

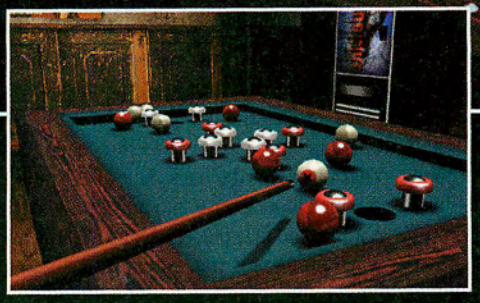
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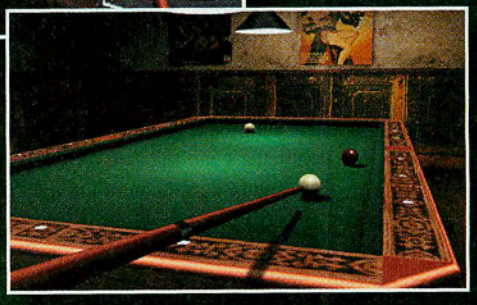




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TextCleaner

TEXT PROCESSING

DEVELOPER: Studio 405
CONTACT: 301-270-8445, http://www.studio405.com
PRICE: $110 (SRP)
REQUIREMENTS: Any Mac; System 7 or later (7.5 for drag and drop); ASCII text files

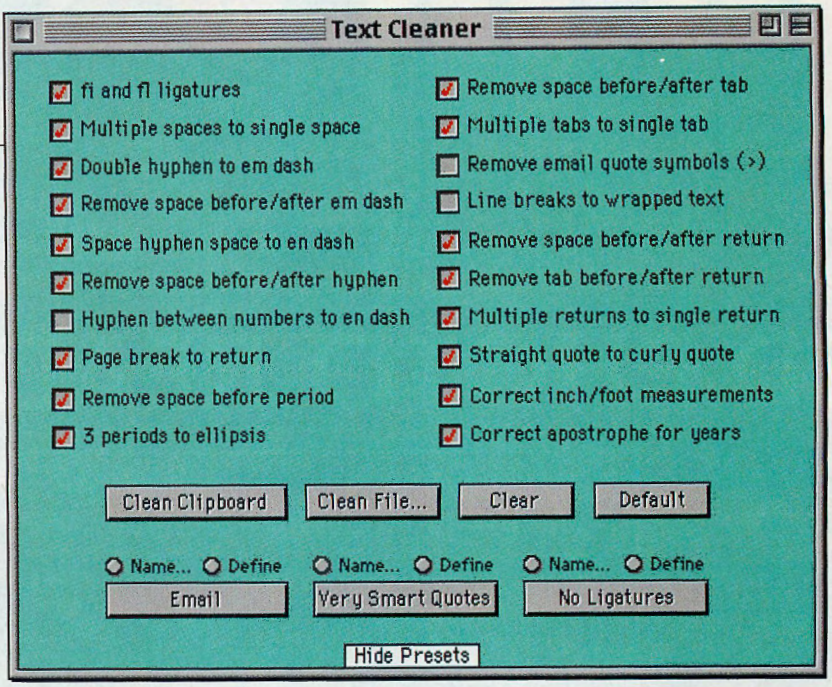


FIND THE FREEWARE Lite version of Text Cleaner on The Disc.

Simple as soap, TextCleaner is a mini-application that does just one thing—cleans crud from your ASCII text files.

You know the crud we mean—the grimy page breaks, hard returns, tabs, spaces, email quotes, hyphens, and straight (not curly) quotes that always seem to soil email messages, text downloads, and alien word processing files. You could run those dirty documents through your word processor's find-and-replace feature all day long and in the end still have to scrub them by hand with a toothbrush.

TextCleaner's back-to-basics interface consists of a single dialog with check boxes. You select a document, then choose any of up to 20 simultaneous cleanup operations. TextCleaner can strip away multiple spaces and returns; delete line spaces and wrap text; remove spaces before and after tabs and hyphens; change certain patterns of hyphens and spaces to en or em dashes; and add the correct marks for inch and foot measurements. Some of the cleanups are standard stuff that most word processors can do; but others, such as those involving the proper formatting of dates and measurements, are pretty smart and will save you real work. And TextCleaner does them in the right order, so each cleanup interferes as little as possible with the next. (Advice: Examine the dirty document carefully before you use TextCleaner. You're likely to want to change the default settings for cleanup actions.)



IT'S NOT BON AMI, but TextCleaner will scrub your documents clean of text crud.

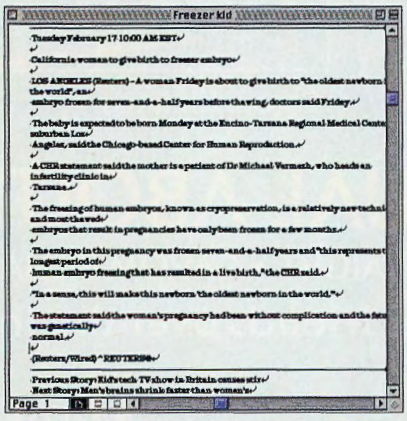
Of course, there's such a thing as being too simple, and TextCleaner does err in that direction. Stuff you'd expect to be able to do, such as actually *seeing* your documents from within the program—well, forget it. You have to run TextCleaner alongside your word processor and pop back and forth, opening and closing the doc each time. That's hard on the back. Likewise, you'll be putting elbow grease into converting files to ASCII in the first place, because TextCleaner won't do that for you, either.

Custom Clean

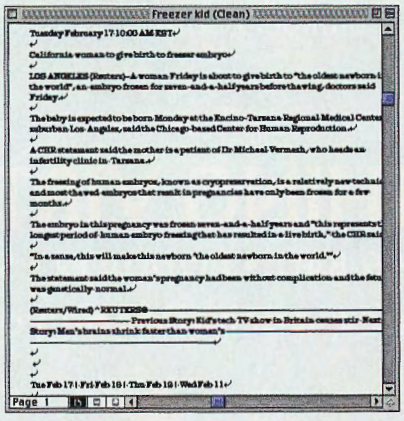
If you clean lots of similar docs, make your own TextCleaner preset for batch jobs. Click Show Presets in the TextCleaner window, then click the Name and Define buttons for one of the existing presets to customize it.

Finally, sometimes you have an awful lot of cleaning to do, and TextCleaner has some limitations when it comes to really big jobs. The program does provide a utility that automatically cleans any number of files you drop into it. But when you do a batch cleaning, you can't specify individual settings for docs, nor can you save them to another folder or rename them. (When you're batch cleaning, put related docs in one folder and rename them ahead of time.) And TextCleaner is not commodity priced: $110 puts it out of the range of regular cleaning persons.

Despite its limitations, TextCleaner can certainly save you a ton of scrubbing. It'll make your text brighter and your documents whiter.—*Steve Anzovin*



THOSE EXTRA RETURNS and spaces make this a job for TextCleaner.



VOILA! HERE IS the document, all spic-and-span for your visual pleasure.



GOOD NEWS: Quickly cleans extraneous text characters from ASCII docs. Tackles tough jobs such as smart quotes and measurement marks.
BAD NEWS: You can't see the docs you're working on within the program. No batch processing control. Only works on ASCII.

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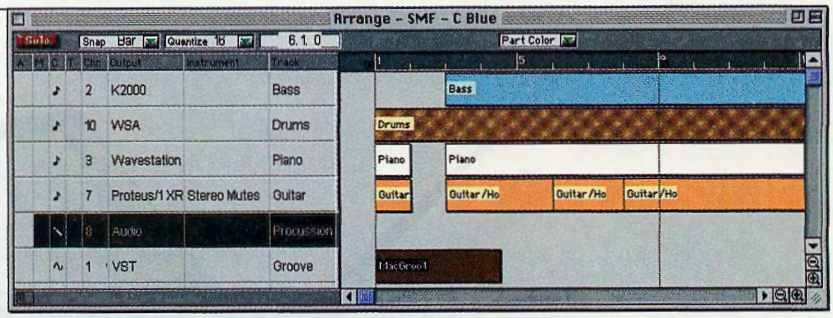
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Cubase VST 3.52

GRAPHICS & SOUND

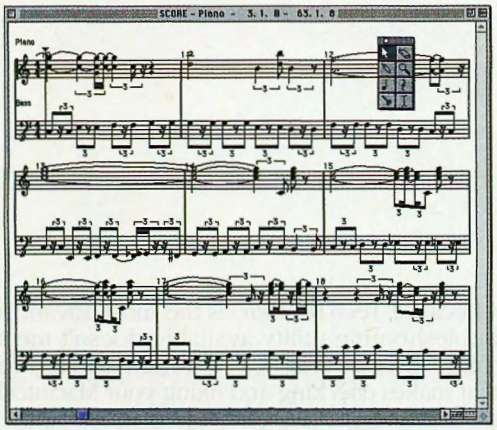
COMPANY: Steinberg
CONTACT: 818-993-4161, http://www.us.steinberg.net
PRICE: $399 (SRP)
REQUIREMENTS: PowerPC, System 7.5.3 or later, 16MB of RAM (24MB of RAM recommended), 5MB of free hard disk space (CD-quality stereo files use 10MB per minute), CD-ROM drive



THE ARRANGE WINDOW SHOWS an overview of the tracks. You can move them in time or to other tracks, select and copy parts, and double-click on a part to bring up an editor window. Also, on the left side you can assign instruments as well as solo and mute tracks in your setup, select what type of file you want to work with, assign MIDI or mixer channels, and name tracks.

FIND THE TRACK "Groovin" on The Disc.

If you ever wanted to create your own MIDI sequences and audio recordings, or process your own electronic tracks, but you were afraid to take the plunge because the amount of equipment was daunting, your wait is over. Steinberg has created Cubase VST (Virtual Studio Technology), which loads a complete studio into your Power Mac. This splendiferous software studio includes full MIDI sequencing and editing, hard-disk recording, real-time audio processing, mix-down automation, and score layout and printing capabilities.



THE SCORE EDIT WINDOW is where you edit note data, and arrange and lay out your music for printing.

The package includes two print manuals, a CD containing two additional PDF manuals, and an in-depth tutorial movie demonstrating the basic features and operations of the program. Since Cubase is complex, it's nice to have this wealth of well-written material available. (You always read the manuals, don't you?)

Once you're set up, you can record live drums, rhythm parts, or anything else you like directly to your hard drive, and then let your creative urges take over. As with any digital-audio creation, the more hard disk space and RAM you have, the more tracks you can record and the better everything works. Once your files are on the drive, you can edit mistakes, correct your pitch, and loop sections. Cubase goes out of its way to make sure that most audio edits are nondestructive, so your original take exists intact, somewhere.

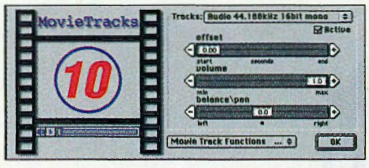
Add MIDI tracks to your arrangement and quantize to move the notes automatically toward the nearest beat of a predefined groove, metronomic tempo, or the tempo map you made, so everything grooves together. The editor windows

Drum Loop Tranceformation

Cubase VST gives you the power to transform a mono drum loop into your own crunchy electronic groove, to disassemble individual hits, to assign each drum sound its own location, and to produce your own EQ and effects for each new track.



1 First you have to get a drum loop into Cubase. Listen to an audio track with the AppleCD Audio Player. Use the freeware program GrabAudio to select the track and set the timings.



2 Back in Cubase, using the Movie Track Functions pop-up, choose Open Movie and find the file you just created. Using the same pop-up, save the file, and then choose Export Audio. Name the new file and use the Selection menu to either Export or Convert To MovieTrack's Rate.



3 Select a new audio track. Select Import Audio. Double-click the track to reveal the wave form. Line up the beats with the bar numbers by changing the tempo in Transport Bar. Create a two-bar loop. Set channel to Any.

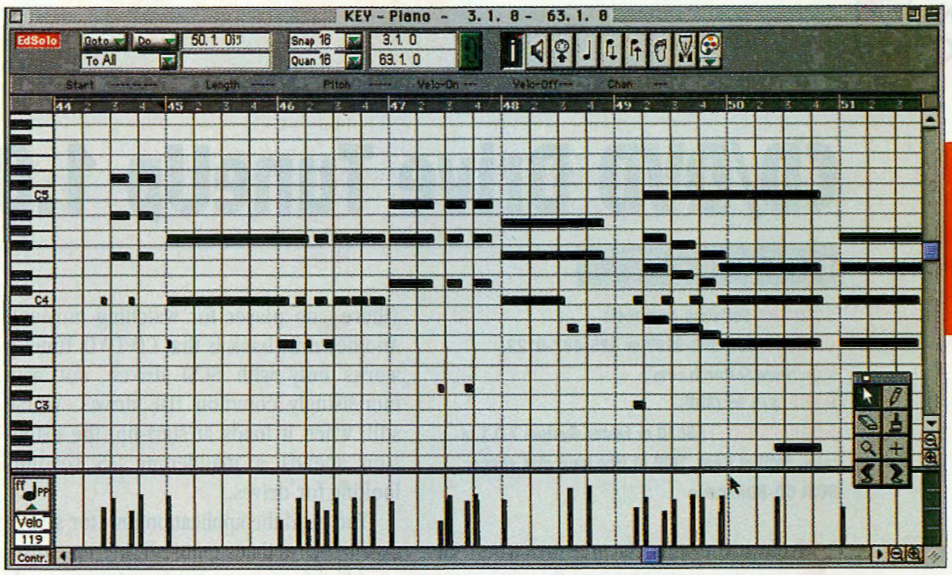


4 Select Dynamic Events in the View pop-up (Edit window), then change Volume to M-Points from the Volume pop-up. Next, choose Snip M-Points from the Do pop-up. Each hit is now a separate sound. Isn't it fun to get to know your groove so intimately?

allow an amazing degree of control, from the most minute tick (384th of a beat) to every MIDI event in your song. The Interactive Phrase Synthesizer creates new music modeled from existing MIDI tracks and generates complicated arpeggios and other ingeniously designed variations of your music.

Style Tracks, another innovative feature, lets you create accompaniment patterns. These mimic features on the organs you hear in malls, where playing a chord sets up a whole rhythmic pattern on which you can improvise (you can also use one of several accompaniment patterns included on the CD). The only difference here is that you can use any of your MIDI devices to create your own patterns, making them more musically interesting and hip than the old standby beguine or samba rhythms. You can set up eight variations, which you trigger from the lower octave of your MIDI keyboard, and perform them live or record them as MIDI events. You can really wail with some new house or techno patterns here.

Once all your material is recorded on the tracks and edited, then the mixing processes can balance levels, adjust the equalization (up to four separate bands of fully parametric EQ per channel), pan the signal, and add effects. The window display emulates a real studio-type mixing board, and all parameters—including faders, buttons, knobs, EQs, and effects—can be automated for that perfect mix. The VST PlugIn concept is another bonus. The package includes excellent reverbs, a fuzz box, a chromatic tuner, a binaural speaker simulator, and more. These look and operate just as their hardware counterparts do—including a graphic power switch that you must turn on to begin



IN THE KEY EDIT WINDOW, you can hear, add, and delete notes and change their position. The Controller Display under the grid allows you to edit continuous events such as velocity, volume, pitch bend, and other controller data.

operations—except that you access the controls with your mouse. It'll be a long time before this system becomes obsolete. Other manufacturers and individuals are stretching the sound barriers, creating new PlugIns to ensure that the latest sonic-effect tool is always available. There are already hundreds out there.

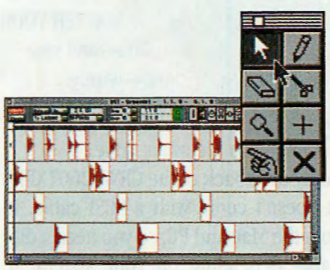
But wait, there's more. You can lay out and print the score of any or all your MIDI parts using the Score Editor. You can even change or write new passages in that window. What more could you ask for?

Do you need to write and sync music to a QuickTime movie or another external device? Cubase sync options include SMPTE, MIDI Time Code, and MMC linking with existing music or tape. If you don't need them, you probably won't even know they're there, but if you're a professional creating movie scores or adding tracks to an existing piece of music, these features are pure gold.

Since Cubase is so deep, Steinberg offers unlimited free tech support; however, you have to make a toll call to Southern California. Cubase's wealth of features and well-designed integration make it an inspiring and affordable tool for musical neophytes as well as pros.—*Judy Munsen*



GOOD NEWS: Powerful MIDI and audio file recording software. Expandable real-time PlugIn effects. Score layout and printing capabilities. An abundance of impressive and useful sound-editing features. BAD NEWS: It's more than challenging to learn how to use the vast number of features. Shift-dragging audio events between lanes is difficult to control.



5 To place drum sounds in separate lanes, notice where the kick drum pieces are; select them using the Arrow and shift key. Hold the shift key and, with a downward move of the mouse, move them to the second lane. Find other drum sounds; move them to their own lanes.



6 With the track playing, open the Monitor window from the Audio menu. Using the sliders to the right of each track, adjust the volume; do not overload the level. Get a relative balance and stereo location for all your drum parts.



7 Click on the FX/EQ button in the Monitor window to bring up the Equalization window for a track. Here you have up to four separate parametric EQs. The handy Preset buttons start you in the range you want to affect. Click On when you're ready to add effects.



8 Choose Effects from the Audio menu; turn on the Power button in the module. Select a parameter; adjust it with the big round knob. You can assign effects to any track you've made. Once you get a mix together, save the whole thing as an AIFF file by selecting Export Audio.

reviews

CD/DVD Drive TuneUp 1.0

DISK & FILE

COMPANY: Software Architects
CONTACT: 800-863-9297 or 425-487-0122, http://www.softarch.com
PRICE: $79.95 (SRP)
REQUIREMENTS: 68030 or faster, System 7.0.1 or later, 8MB of RAM, 1MB of free hard disk space, SCSI CD-ROM drive

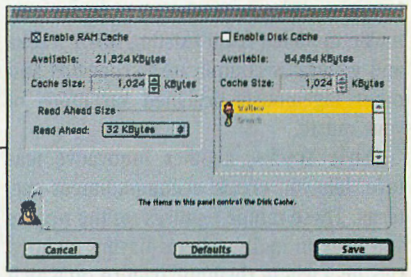
Software Architects promises you "the speed you want from the drive you have" with its new CD/DVD Drive TuneUp, a package consisting of an extension (to replace the Apple CD-ROM extension), an application for setting cache options, and an Audio CD Remote controller for listening to music discs. If this constitutes a tune-up, we'd hate to see a car crash.

The CD/DVD TuneUp INIT acts as a driver for over 100 CD-ROM drives, but it currently supports only two DVD drives, and then only in data and audio mode (there's no player for watching movies). Another drawback is that CD/DVD TuneUp works only with SCSI drives, not with increasingly common IDE drives. Worse still, when it loads at start-up, the extension spends a maddening 25 seconds looking for drives.

You need the application only for setting up the caches that supposedly increase disc-read performance by keeping recently requested data in memory or in an invisible hard drive file. In real-world testing the caches often substantially hurt performance on initial reads and offered little benefit during subsequent reads.

The best component is the pedestrian Audio CD Remote, which provides basic audio CD control features: volume, track, scan, play, pause, stop, and eject.

If you use a variety of third-party CD-ROM drives, forget about CD/DVD Drive TuneUp and buy FWB Software's CD-ROM ToolKit (see review, Dec/97, p.63). It doesn't boost performance much, but it costs the same, supports a far wider range of drives (including almost every IDE and SCSI drive on the market), and comes with a nifty CDT Equalizer for tweaking audio playback.—*Owen W. Linzmayer*



THESE CACHES ARE SUPPOSED TO speed things up, but in reality they often make reading from CD-ROMs slower; even when they do work, the improvement isn't noticeable.

GOOD NEWS: Handles multidisc changers. BAD NEWS: Limited DVD support. No IDE support. Long delay at start-up. Cache often harms performance.

Yamaha CD-RW Drive

HARDWARE

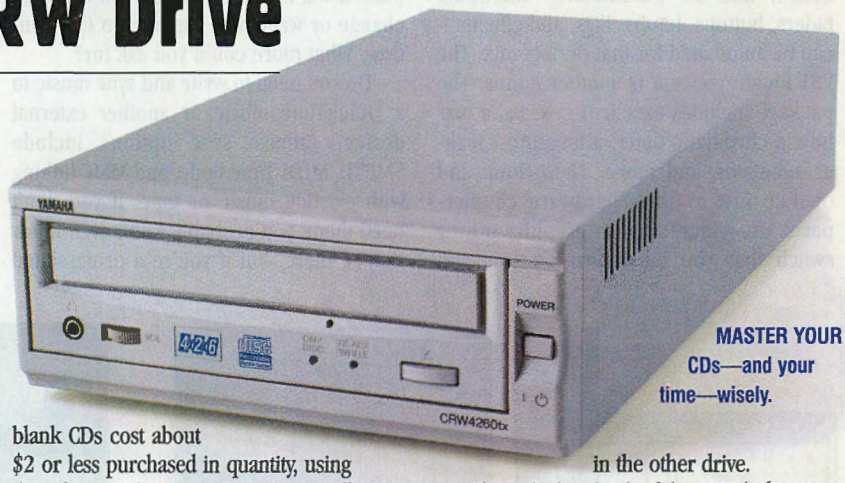
COMPANY: Yamaha Corporation of America
CONTACT: 800-823-6414 or 408-467-2300, http://www.yamaha.com
PRICE: $549.95 (SRP)
REQUIREMENTS: System 7.0 or later, 1MB of free RAM to run Adaptec's Toast

The newest CD-mastering drive from Yamaha sets the industry standard in speed, reliability, and ease of use, even if its full name—the CRW4260TXPM—is more than a mouthful. Not only does the CRW4260TXPM function like a regular CD burner, it also handles rewritable media, making backups and multiple edits convenient. Included is Adaptec's Toast mastering software, which makes it easy to create many different types of CD formats.

The drive reads at 6X and writes normal CD-Rs at 4X and rewritable CD-RWs at 2X, making this one of the fastest CD burners available. A full CD at 4X speed takes just under 20 minutes to master, while a full CD at 2X takes almost 40 minutes. And now that blank CDs cost about $2 or less purchased in quantity, using them for just about everything is cost effective. When it comes to archiving, CDs are much more reliable than tape drives, and though their capacity is smaller, you can get about 30 CDs for the price of one tape. The only inconvenience is having to find your data on separate CDs rather than on one tape.

The CRW4260TXPM also works well as a regular CD drive. If you've ever had to eject your favorite audio CD regretfully in order to use another CD, you'll love putting your audio CD in the CRW4260TXPM and changing CDs in the other drive.

The only drawback of the CRW4260TXPM is that it doesn't come with a SCSI cable. It serves both the Mac and PC, so you need a different cable depending on your system. It would be better to have a drive ready to go out of the box without having to worry about finding a SCSI cable.—*Wade Albright*



MASTER YOUR CDs—and your time—wisely.

GOOD NEWS: Fast. Easy to use. Serves as an additional CD-ROM drive. BAD NEWS: Doesn't come with a SCSI cable.

Some people think, Voodoo is just for games.

Not quite!



We haven taken Voodoo just this little bit further. In fact VillageTronic is the first and only hardware developer on the planet to make the impossible happen: We tamed the insanely fast Voodoo hardware and forced it's output into a 2D window. Yes you're right! 3D Overdrive is the only way to get every important 3D API you want and need in one board. Period.

- **RAVE** for your favorite 3D apps and games,
- **GLIDE** for incredible graphics with games as well as
- **OpenGL** to be prepared for whatever the future will hold.

So if your beloved WinTel buddy is around again, why not driving him nuts by showing off your new hardware? Oh and by the way please don't forget to tell him that 3D Overdrive is -of course- ... MacOS only!

What do the industry pundits say?

"3D Overdrive is the only 3Dfx card on the Mac that actually works!"

says Brian Greenstone, Engineer of the Quickdraw3D developer team at Apple Computer, Inc. and CEO of Pangea Software.

Expect the impossible from the Masters of Voodoo ... to be continued ...

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power up

We don't want to tease you, but feast your eyes on these future titles.

FUN & GAMES

NEW GAME!

Crop Circles: Escape from Planet 3

Zero Entertainment: 206-329-8986, http://www.zeroentertainment.com

Zero Entertainment, dedicated to boxless software, is releasing Crop Circles: Escape from Planet 3. Sci-fi meets pop culture in this arcade game in which you control an otherworldly flying saucer: Evade all farmers, government agents, and photographers. Your mission is to blaze mysterious markings onto the surface of the Earth while beaming up cows, which power your spacecraft. Hint: Don't suck up mad cows—they damage your celestial vessel.—*JH*



BEAM THEM UP, Scotty. You need to suck up cows to fuel your ship. Then use your spacecraft to draw dreamy circles.

FIND A DEMO of RedJack: Revenge of the Brethren on The Disc.

Previews

Dark Vengeance

Reality Bytes: 617-621-2500, http://www.realbytes.com

Vengeance is a dish best served cold. In Dark Vengeance, you enter a fantasy world held captive by a magical eclipse. A band of renegade elves rises to challenge the world order. These dark elves vow revenge on surface dwellers. You must fight off this *Anschluss* of evil and free the world from the eclipse.

This state-of-the-art game is a third-person action adventure in a fully engrossing 3D world. Not only can you choose from five characters—each character has a distinct fighting style, follows a unique story line, and acquires new skills in missions that take place both indoors and outdoors—Dark Vengeance also features 20 missions, over 40 weapons and spells, and over 40 enemies to battle. Could you wish for a tougher challenge? How about 32-player death matches and team network gaming via the Internet? Dark Vengeance will be optimized for 3D graphics accelerator cards.—*JH*



THE GLADIATOR IS ONE of five characters who defend humans against dark elves and their acolytes.



GAZE AT THE AMAZING light effects that contrast with the dark hall in this 3D environment.



LOOK OUT FOR IMPOSING enemies who attack you from the air.

Carmageddon 2

SCI: http://www.sci.co.uk

Step right up! Strap yourself in! Get ready to drive right on over Miss Daisy in this follow-up release to the original, wildly successful Carmageddon. If you've ever played Carmageddon and loved it, you'll love Carmageddon 2. What more can we say? Words can't compare with the cathartic experience of powering your colossal car up and down the racetrack as you crush pedestrians and mortal enemies. To crush or not to crush? That's not the question in Carmageddon 2.—*JH*





NEW GAME!

The X-Files





Fox Interactive: 310-369-5369, http://www.foxinteractive.com

Good news for fans of the popular television series *The X-Files*. Fox Interactive has just released a CD-ROM adventure-mystery based on the program.

The game puts you in the role of Seattle FBI agent Craig Willmore; you're working on a typical case. You'll interact with special agents Scully and Mulder, played by stars Gillian Anderson and David Duchovny, through HyperBole's patented VirtualCinema, a new technology that allows you to click on items and call up a dialog box in the middle of full-motion video.

Chris Carter, creator of the TV series, is working closely with Fox Interactive developers to make sure the game maintains the aura of mystery and intrigue so prevalent in the hit show.

So if you want to try your hand as an FBI agent examining mysteries of the paranormal, X-Files marks the spot. Both PC and Power Mac versions should appear on store shelves this summer, perhaps by the time you read this.—*John Lee*

Teaser

Tomb Raider Jumps to the Mac?

Lara Croft, perhaps the sexiest digital woman ever to grace the cover of a PC magazine, has seen the light. We hope that after a long flirtation she's decided to enter into a much-awaited relationship with the Mac. Lara, the heroine of Tomb Raider—who's more than just a pretty face—punched holes in the dusty "men-only" perceptions of the gaming world when she first popped up in 1996 as an intelligent, resourceful, and tougher-than-lacquered-fingernails archaeologist-adventurer. Lithe, agile, and utterly fearless, she plowed through the danger-strewn hallways and ancient temples of Tomb Raider's dead civilizations, exploring, leaping, solving puzzles, and blasting away bad guys with a deadeye's marksmanship. Eat your heart out, Duke Nukem. If all goes well, the Mac version should hit stores in the fourth quarter of this year.—*John Lee*



THIS IS NO BABE in toy land. Think she's not so tough? Think again! Lara packs a punch.

RedJack: Revenge of the Brethren

THQ: 818-225-5167, http://www.thq.com

In the mood for black piracy and some good old-fashioned skullduggery? Get ready for RedJack: Revenge of the Brethren, an action-adventure title due to hit stores in August. RedJack, perhaps the scummiest pirate ever to hoist a cup of grog, has been dead for 17 years, betrayed by one of his own men. Now it's time for RedJack's crew, aka the Brethren, to reassemble, find the traitor, unearth their dead captain's pirate treasure, and sail off into the Caribbean sunset.

The fighting is fun. Old Lyle, a snaggle-toothed, foul-mouthed member of the original crew, will show you how to parry, how to cut and slash, and how to duck thrown objects. Learn well: You'll need all three skills to fight cutthroats, assassins, and ghosts. You'll visit exotic ports of call in this rough and rowdy adventure. You'll even encounter tons of adventures, puzzles, and oddball animated characters along the way. Hardy-har-har.—*John Lee*

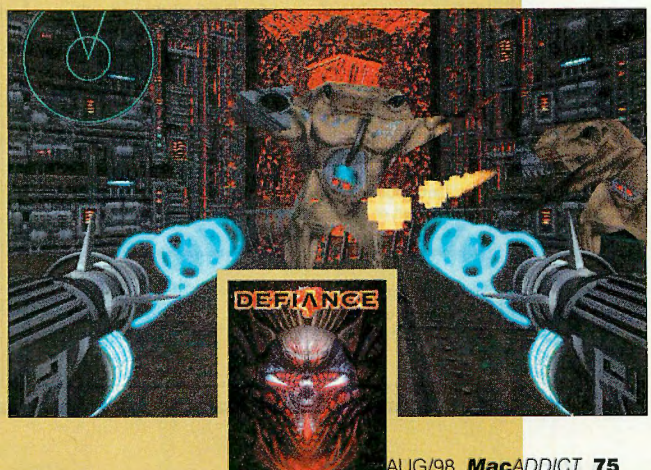


A DYING CAPTAIN RedJack, betrayed by one of his own, extracts a promise of retribution from his crew.

Defiance

Logicware: 888-564-4245, http://www.logicware.com

"If it's battle you want, it's battle you'll get!" say the makers of Defiance, the critically acclaimed 3D action adventure, which is coming to the Macintosh in August. As the test pilot of an experimental vehicle, the LAV-6 Saber attack hovership, you must brave 13 levels of intense action. With a cutting-edge 3D engine and QuickDraw 3D RAVE acceleration, Defiance is unlike anything currently available for your Power Mac. Prepare to engage 18 different creatures that attack you from all sides! Defiance also offers Death Match, which accommodates network battle for up to eight players. And of course you get awesome weapons with which to gib and frag all beasties to the tunes of an original soundtrack. If you survive, you'll get to witness Defiance's shocking conclusion.—*JH*



DEFY DEADLY CREATURES as you make your way through 13 levels of puzzles, mystery, and mayhem.

power up

DISK & FILE

Keep Your Mac Virus-Free

by Kevin Savetz

Computer viruses don't seem like a big deal—that is, until your Mac catches one. Once that happens, a virus may slowly corrupt your files, print strange messages, rename your hard drive, or even attempt to erase your disks. Relatively few viruses affect Macs: Macintosh users need to dodge somewhere around 55 viruses, compared to the thousands of strains that beset DOS and Windows users. Don't let that number lull you into believing that your computer is immune from infection. It only takes one virus—passed from a friend's floppy, downloaded from the Internet, or spread over the office LAN—to trounce the precious information stored on your Mac. An ounce of prevention is worth a pound of I-told-you-sos. Here are five steps to protect your Mac from viruses, plus one great Web site you should check out for more virus information.

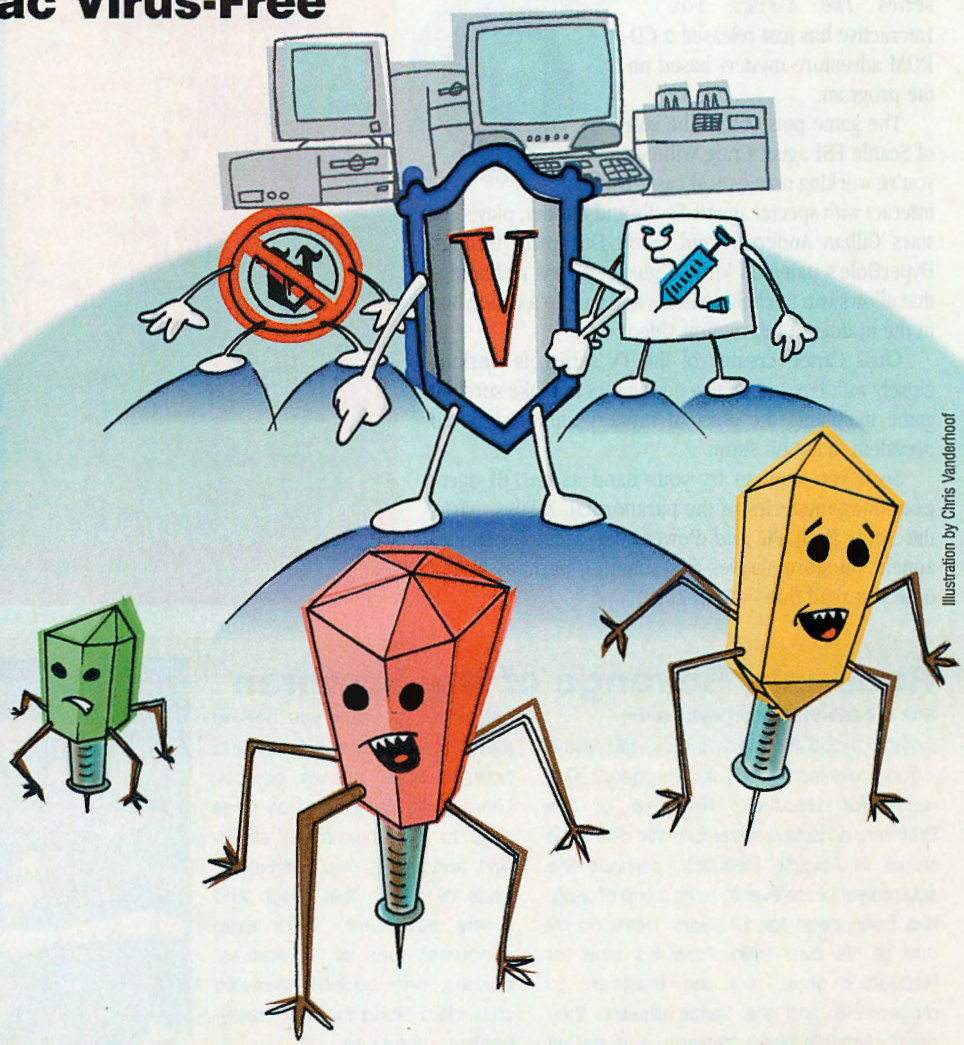
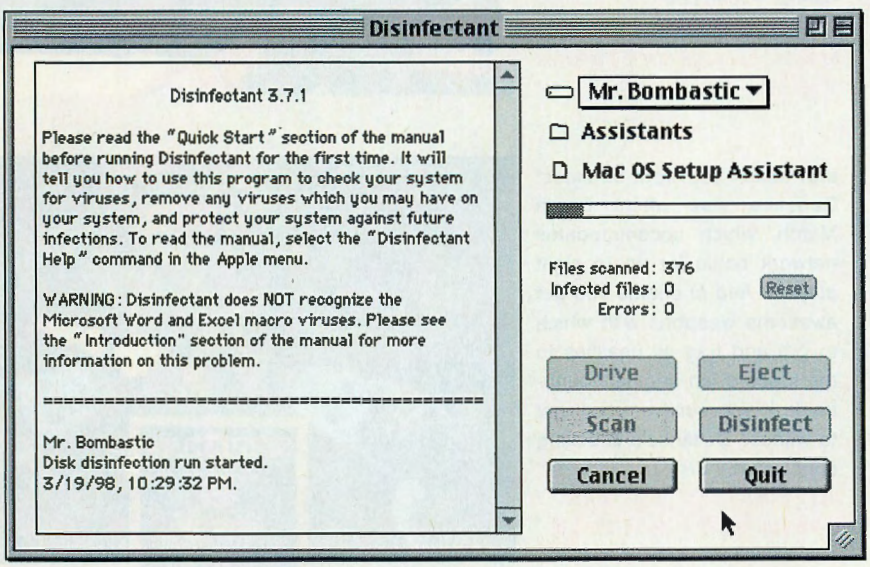
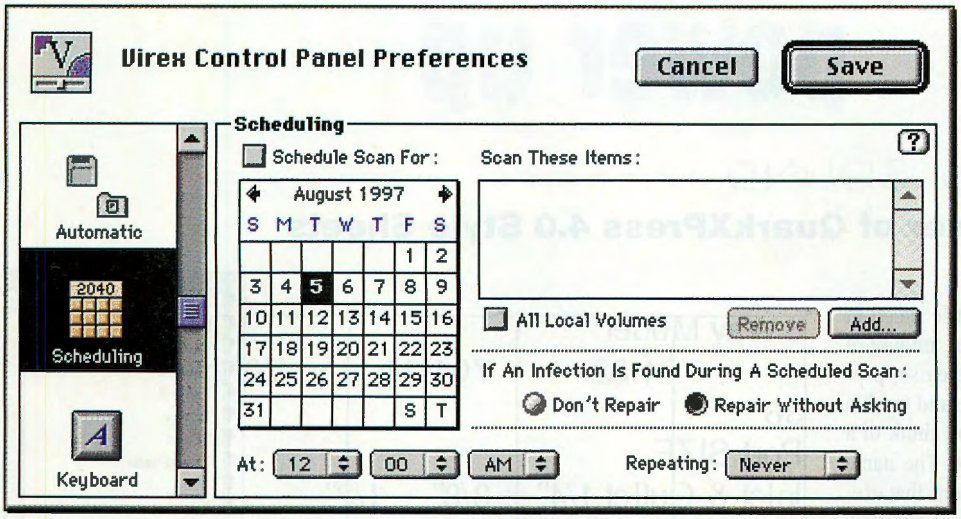


Illustration by Chris Vanderhoof



1 Choose Antivirus Software

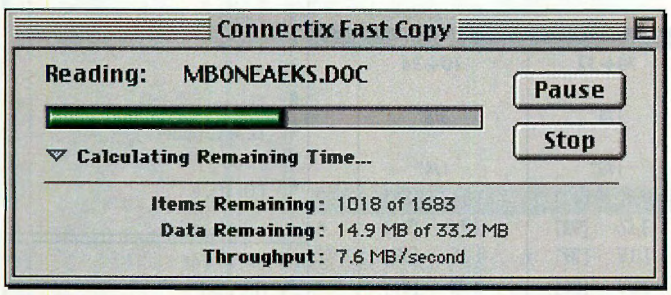
First things first: To keep your Mac free from infection, you'll need an antivirus utility. You can go two ways: Buy a commercial antivirus program, or choose a free one. If a free inoculation sounds like the way to go, Disinfectant (version 3.7.1) is the de facto standard. It does the basic job of scanning your system for viruses and removing any nasties it finds, but it doesn't cover all of the bases. Commercial antivirus programs tend to offer niceties lacking in bare-bones Disinfectant, and, sadly, Disinfectant will not be updated beyond its current version. Contenders in the commercial category are Symantec's Norton AntiVirus 5.0 for Macintosh (http://www.symantec.com/sam), Virex (http://www.drsolomon.com/products/virex/index.cfm), Dr. Solomon's AntiVirus Toolkit (http://www.drsolomon.com/products/avtk/ps_mac.html), and McAfee's VirusScan (http://www.mcafeemall.com/mall/mcafee/vsmacxfact.html).



2 Check Your System for Viruses—and Get Rid of Them After you've purchased or downloaded your antivirus utility, use it *regularly.* It thoroughly searches your Mac's hard disk for telltale signs of viruses. If it finds a virus, the software removes it—hopefully before the virus damages your precious data. Like that roll of dental floss you've pushed to the back of the medicine cabinet, antivirus software doesn't work unless you use it often. Running a thorough scan once a month should be fine for most people. Run it more often if you download many programs or exchange lots of disks with your associates, or if your Mac starts to act wonky. Every one of the programs listed above includes an extension or control panel that watches constantly for nefarious virus activity, even between scans. Make sure you enable that function for maximum protection.

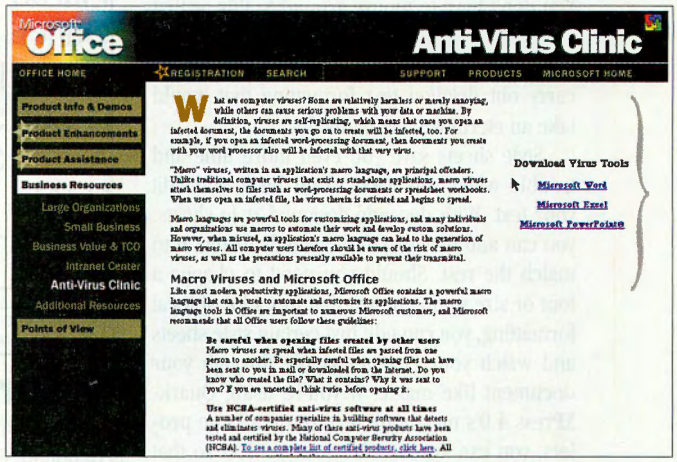


3 Keep Your Antivirus Software Up to Date In order to assure that no new strains can take residence in your Mac, keep your antivirus software up to date. Commercial antivirus tools make this easy: Their makers automatically send you updates—enhancements that tell the program how to identify new viruses—via the Internet or snail mail. If you use the freeware Disinfectant, don't bother looking for new versions, because there won't be any. You can also check with sites such as Version Tracker (http://www.versiontracker.com), which keeps track of the latest updates. Just search for the appropriate program or update name.



5 Lock Out and Back Up No antivirus software is foolproof. Happily, software is not your only defense. Viruses can't infect read-only media. If you walk around with floppies, Jaz disks, or other removable media in your pocket or purse, lock them to protect them from infection when you pop them into others' computers. A virus can't infect a medium it can't write to. Your ultimate defense—and you've heard this a thousand times—is to back up your data regularly. Don't just keep one backup of the most recent version; instead, rotate between several sets of back-ups. Keep them somewhere safe. Hide them in a place where no one ever goes. Put them in the pantry with your cupcakes. That way, even if your computer does manage to get infected, you can be sure that you've got at least one safe copy of your data.

Kevin Savetz (http://www.savetz.com) is the keeper of Trivial.Net—trivia just for nerds—at http://www.trivial.net.



4 Trounce Annoying Macro Viruses Once and for All A relatively new and exceptionally annoying type of virus is the *macro virus.* Normally viruses can travel only via infected applications. Macro viruses are the exception to the rule: They travel in the documents of programs with powerful scripting languages. Files in Microsoft Word and Excel are the most common macro virus hosts. Macro viruses are cross-platform—your Mac can catch a macro virus created on a PC. One way to deal with them is Microsoft's antivirus tool, available from http://www.microsoft.com/office/antivirus.asp. These scripts eradicate the most common Word and Excel macro viruses.

SIDEBAR
Virus help is online

A great place to find the latest information on Macintosh viruses is at Mac Virus (http://www.macvirus.com). This Web site, maintained by Susan Lesch, contains a ton of useful information about Macintosh system viruses, macro viruses, and other annoying pests. If you're looking for up-to-date virus information, check here early in your search. Mac Virus has an interesting article on the recently discovered Autostart 9805 Worm, which is the first worm to infect the Macintosh. To combat the Autostart 9805 Worm, Mac Virus recommends that you turn off the Enable CD-ROM AutoPlay in the QuickTime settings control panel. You can see if your Mac is infected by using the Finder's Find command to look for invisible files named DB, BD, or DELDB at your hard drive's root level, or those named Desktop Print Spooler, Desktop Printr Spooler or DELDesktop Print Spooler in the Extensions folder. Files named Desktop DB and Desktop Printer Spooler are legitimate files. The Autostart 9805 Worm affects PowerPC Macs only.

power up

GRAPHICS & SOUND

Unleash the Power of QuarkXPress 4.0 Style Sheets

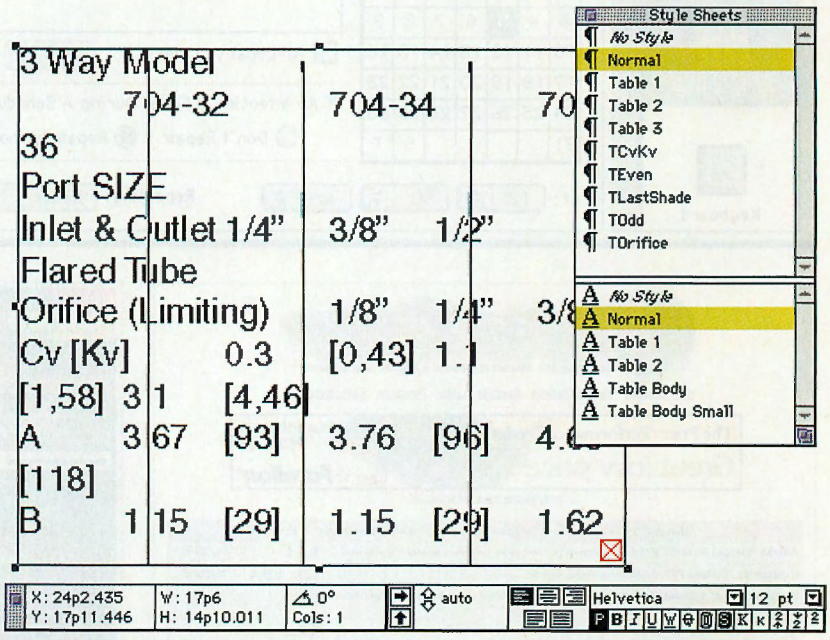
by Elyse Chapman

The biggest reason for using style sheets in QuarkXPress is the monstrous amount of time and toil they save, but even so, professionals often don't take the time and trouble to set them up properly. If it helps, think of a style sheet as a name in a palette. The name carries a whole bunch of instructions that execute when you click on it with text selected. You don't have to mouse around to this or that menu or palette, changing every little attribute spec by spec. In less than a second, style sheets carry out detailed text formatting that would take an eternity to set manually.

Style sheets save you even more time and trouble when you need to go back and edit your text. With decently designed style sheets, you can add new text and instantly format it to match the rest. Should you need to change a font or size setting in text that has a lot of local formatting, you can edit just certain style sheets and watch your changes ripple through your document like magic. If you're using QuarkXPress 4.0's new book feature on a large project, you can synchronize your project so that the style sheet changes you make in one document will be reflected in its sibling documents. If you're a Photoshop 4.0 user, it might help to think of style sheets as a bit like Photoshop actions—formatting instructions assigned to a name in the palette are applied automatically to selected text.

Here's how we worked with style sheets to format a mildly fussy little table that recently came our way. It had siblings that needed identical treatment, so creating and using the style sheet settings from the first table saved us a whole lot of time and effort, not to mention our overall sanity.

Previous versions of QuarkXPress only offered paragraph-level style sheets. Version 4.0 introduces character-level style sheets. In 4.0, paragraph styles (predictably) affect paragraph formatting: alignment, indents, hyphenation and justification settings, space before and after paragraphs, drop caps, leading, keeping a paragraph with the next one, keeping lines together, rules above or below, and tabs, with all of their fussy settings. Character styles, on the other hand, are concerned with the attributes of individual characters or words: font, size, color and shade, scaling, tracking, baseline shift, and styling (bold, underlined, subscript, and so forth).

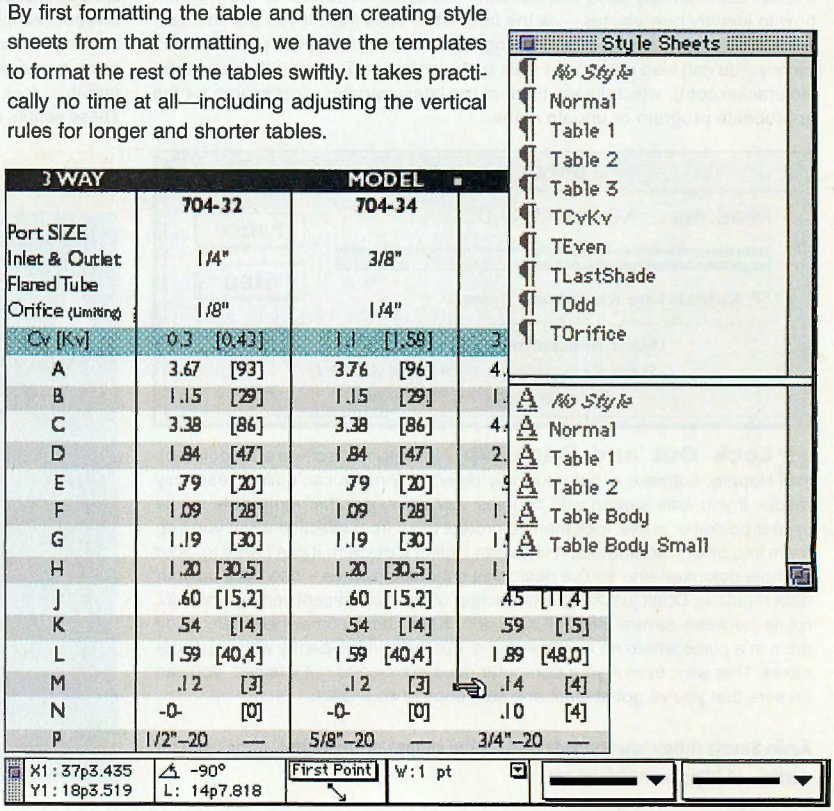


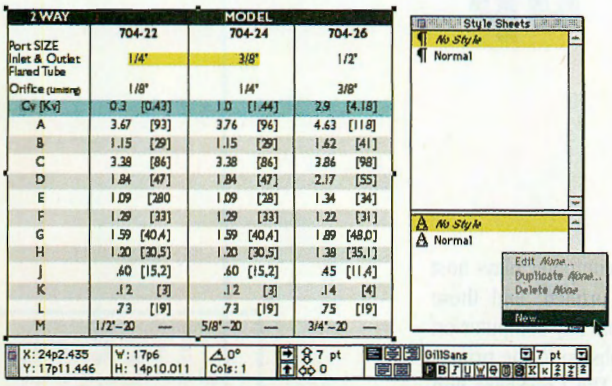
before

The prospect of manually formatting a complex table such as this one is daunting. Fortunately, we have style sheets to help us out.

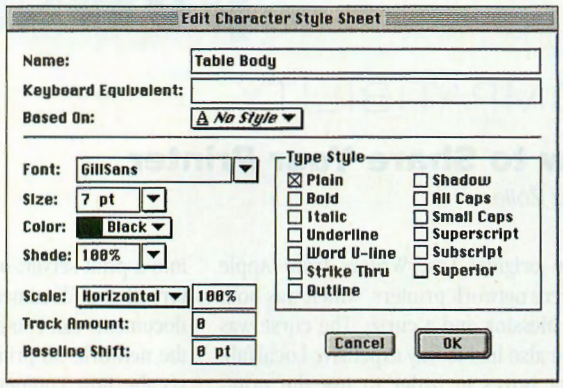
after

By first formatting the table and then creating style sheets from that formatting, we have the templates to format the rest of the tables swiftly. It takes practically no time at all—including adjusting the vertical rules for longer and shorter tables.

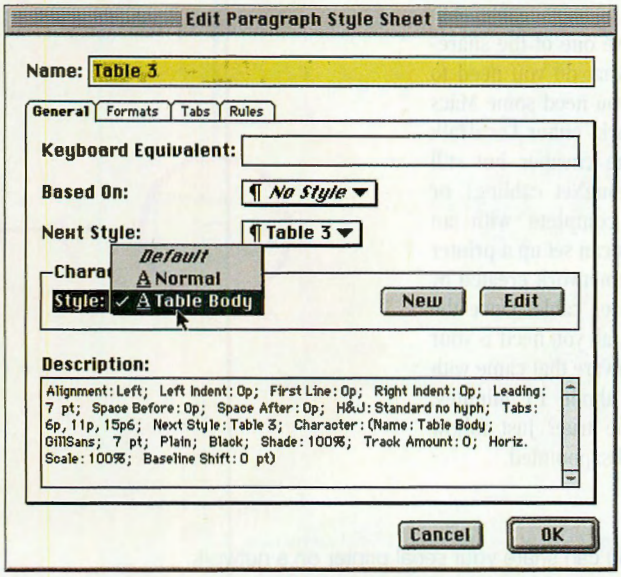




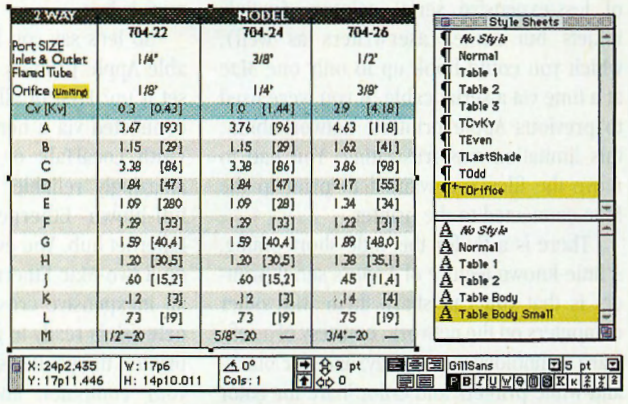
1 The easiest way to create a new style sheet is to select some text that has the formatting you want the style sheet to carry (for paragraph style sheets you just place the cursor in the paragraph), press and hold down the control key, and click in the Style Sheets palette. Click in the upper part of the palette to create a paragraph style sheet, or in the lower part for a character style sheet. Choose New from the pop-up menu.



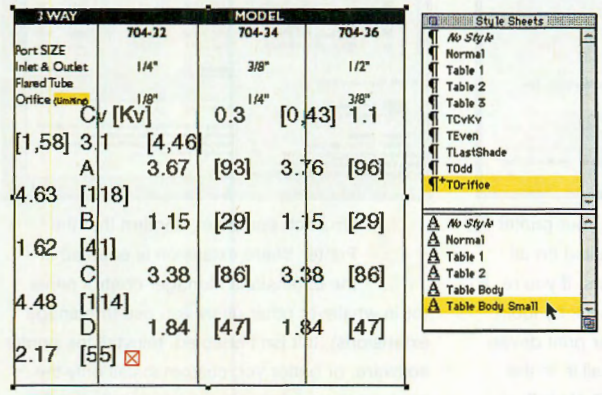
2 After you choose the New option, a dialog box appears with all the attributes of the text you selected already entered in the fields. Name the style sheet (we've named this one Table Body) and assign it a keyboard shortcut. Click OK and you're done—you've created the style sheet. Note that although the text you selected has the same attributes as the style sheet, you still need to assign the style sheet to that text. (This doesn't happen automatically.)



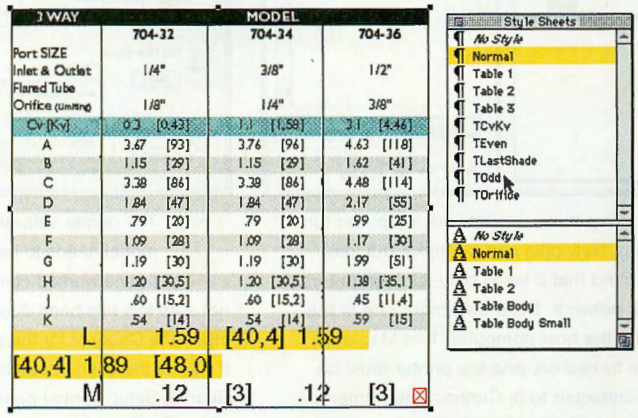
3 It's easiest to create the character style sheet first, and then apply that character style to the paragraph style(s) that will use it. Creating the character style first allows you to specify it at the same time as all the other attributes of the new paragraph style sheet. It saves the step of returning to the paragraph style sheet dialog box to specify what character style you want to apply in that paragraph style.



4 Following the above steps, we've created character and paragraph style sheets from the formatted text. Now we need one more character style sheet for the smaller text used in line 6 (the word *Limiting*). Select just the affected word, create the style sheet (naming it Table Body Small), and apply it to the selection. The Style Sheets palette shows the paragraph style assigned to this single-line paragraph, but a plus sign now appears next to the style sheet name. This plus sign indicates that—since we applied the Table Body character style to text in TOrifice paragraph style—this text strays from TOrifice's formatting. If we select the word *Orifice,* to which we haven't applied the new character style sheet, the plus sign disappears. In short, the plus sign means that something in the selected text or paragraph deviates from the specs of the assigned style sheet.



5 Now that you've finished the style sheets, formatting the table is a breeze. Just select the text to style, and then choose the proper style sheet entry. With a minimum of fuss and muss, this automatically formats the text with the chosen attributes.



6 With a finished set of style sheets, powering through a table takes almost no time at all, especially compared to the pain of formatting such a table by hand.

power up

COMPATIBILITY

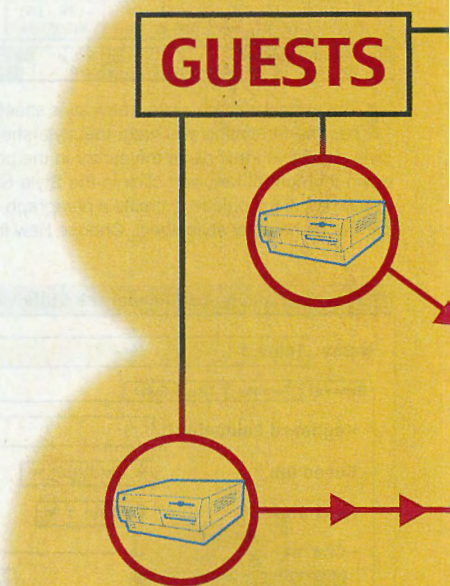
How to Share Your Printer

by Buz Zoller

The original LaserWriters from Apple were network printers, which was both a blessing and a curse. The curse was that you also had to buy expensive LocalTalk network boxes in order to use the printers—no straight serial connection here. The blessing was that once you had purchased the proper network boxes and cables, any Mac on the network could use these printers; they weren't limited to a single computer. Then Apple produced a series of less-expensive serial printers (mainly inkjets but some LaserWriters as well), which you could hook up to only one Mac at a time via a serial cable. If you were used to previous Apple printers' networkability, this limitation was frustrating. You had to move the files you wanted to print to the Mac connected to the printer.

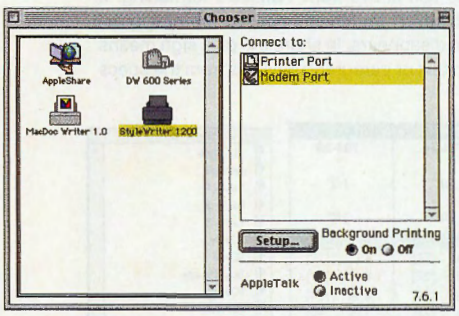
There is a fix for this little shortcoming. A little-known feature of Apple's serial printers is that you can share them with other computers on the network, courtesy of a software technology called GrayShare for black-and-white printers and ColorShare for color printers. How does it accomplish this amazing feat? It does its job by turning your Mac into a print server; one computer plays host for all the documents printed, and these documents can come from any computer on the network. All print jobs go to the printer via the host computer. The GrayShare and ColorShare software doesn't make a serial printer into a true network printer (like most LaserWriters), because a computer needs to act as host. But if you have an Apple serial printer, share the wealth by putting it on the network. And the best part of all—the software is free.

So let's say you have one of the shareable Apple printers. What do you need to set it up? First of all, you need some Macs connected via a network, either LocalTalk (with LocalTalk or the cheaper but still amazingly reliable PhoneNet cabling) or full-blown Ethernet complete with an Ethernet hub. You even can set up a printer on a two-Mac Ethernet network created by an inexpensive crossover cable. Once the network is ready to go, all you need is your printer, the printer software that came with your computer, and about 15 minutes. Sound too good to be true? Just follow along—you won't be disappointed.

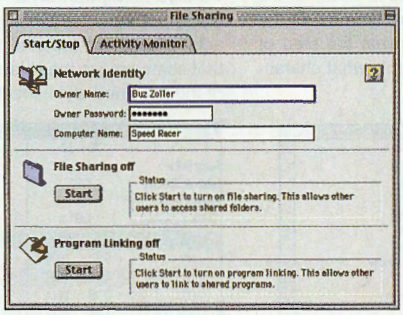


Printing for All

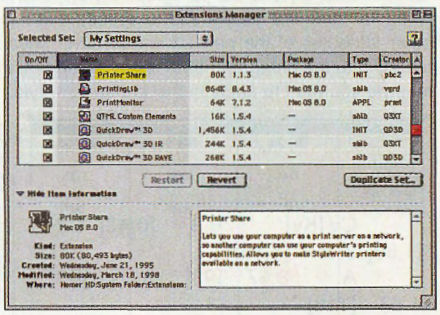
In a mere six steps, you can share your serial printer on a network. All you need is a printer, the software, and a few minutes.



1 Confirm that your network is up and running. Networks can be tricky, but keep in mind that it takes only two computers to make a network. Next, designate one of the Macs to be the host computer. This Mac must always be turned on, and the printer must be directly connected to it. Connect the printer to the host Mac's printer port (although you can use the modem port in a pinch).



2 The printer software for your printer model needs to be installed on all the networked computers. If you're not sure this has been done, check by looking in the Chooser for the proper print driver. If it's not there, you need to install it. In the Sharing Setup control panel in System 7, or in the File Sharing control panel in Mac OS 8, assign each computer a name to give it an identity on the network.



3 On each computer, confirm that the Printer Share extension is enabled in the Extensions Manager control panel (or in whatever other utility you use to manage extensions). If it isn't enabled, reinstall the printer software, or better yet, custom install only the printer software from your system software CD. The current version of the Printer Share extension is 1.1.3, although earlier versions should work fine.

AT THE CORE of any print server setup is the print server, or host. Any networked Macintosh will do. The host handles print jobs from other Macs on the network.

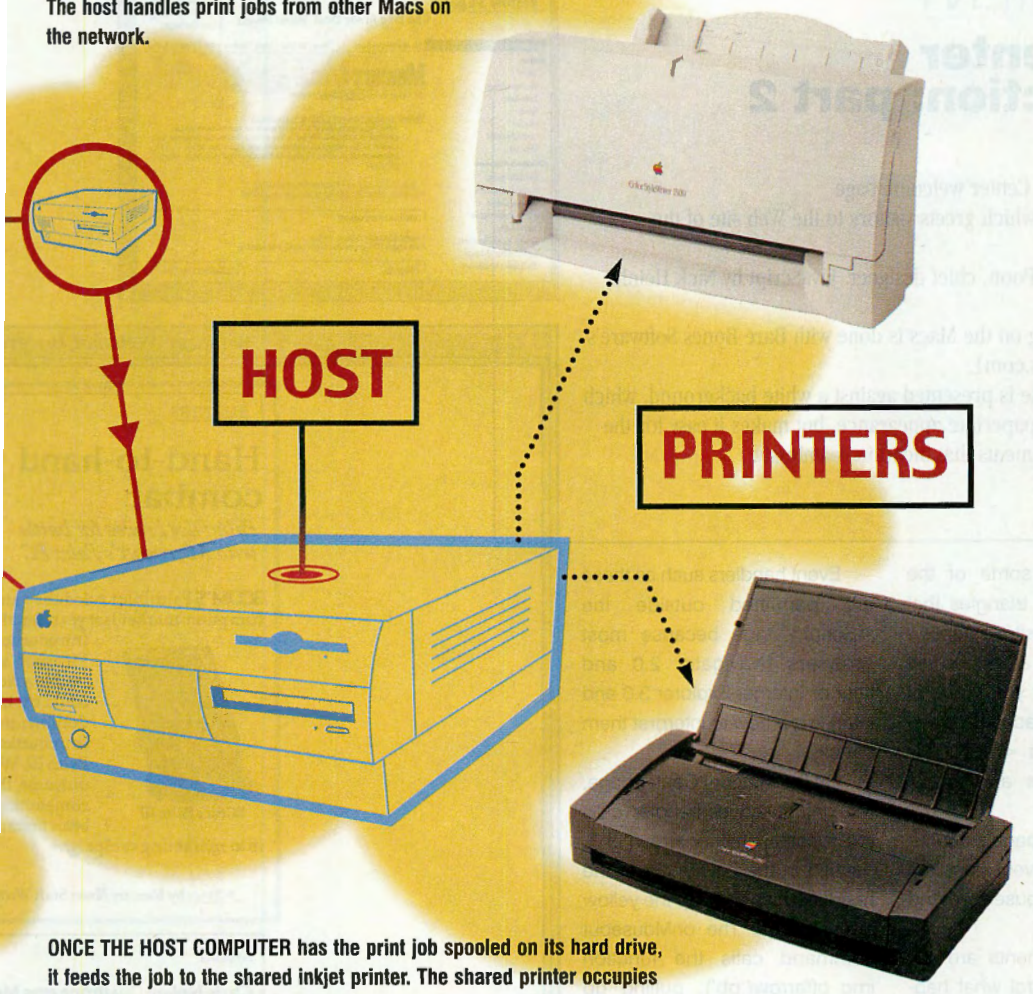


Illustration by Chris Vanderhoof

ONCE THE HOST COMPUTER has the print job spooled on its hard drive, it feeds the job to the shared inkjet printer. The shared printer occupies one of the host Mac's serial ports.

The Right Printer

Here is a list of printers that can be shared and software you need to share them:

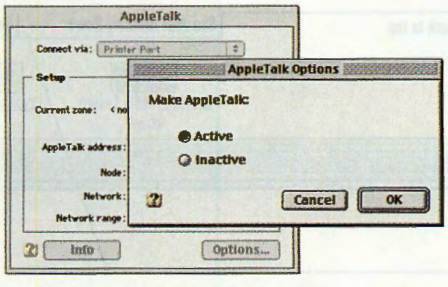
Using GrayShare

- StyleWriter II
- StyleWriter 1200
- Apple Color Printer
- Personal LaserWriter 300
- LaserWriter Select 300

Using ColorShare

- Color StyleWriter Pro
- Color StyleWriter 1500
- Color StyleWriter 2200
- Color StyleWriter 2400
- Color StyleWriter 2500

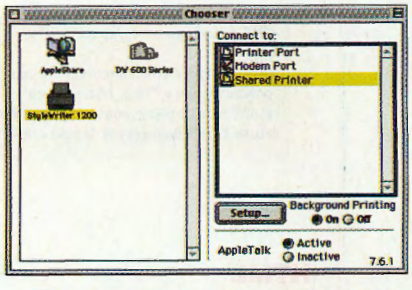
Note: Color StyleWriter 4100s, 4500s, and 6500s all are capable of LocalTalk networking, so you don't need to use ColorShare to access them on a network. You can network all other Apple LaserWriters (except the LaserWriter SC) directly via either LocalTalk or Ethernet. Many Hewlett-Packard and Epson printers also have LocalTalk and Ethernet capabilities, but you need to check your documentation for details. This Apple sharing software works only with certain Apple-brand printers, so your mileage may vary if you try to use it with an unsupported printer.



4 On each computer, check the Chooser or the AppleTalk Control Strip module to make sure that AppleTalk is active. Open the AppleTalk control panel to see that the correct network type is selected—either Ethernet or the port to which your LocalTalk network is connected. If you don't have an AppleTalk control panel, you will have a Network control panel, in which you choose either Ethernet or LocalTalk.



5 On the host Mac, open the Chooser. Click once on the appropriate printer icon in the left part of the window. Then select the port to which you've connected the printer on the right side. You also need to enable Background Printing. Next, click the Setup button, and a window will open. Click the Share this Printer checkbox, and type in a name for the printer (it can be anything). You can password-protect access to the shared printer if you wish, which can help control who prints to your printer. Click OK when you're done, and the printer is now shared.



6 To use the printer from the nonhost computers, open the Chooser on the Mac from which you want to print, and select the printer driver on the left side of the Chooser window. (Be sure to use the same printer driver the host machine uses). You'll see an extra choice on the right side—it's the name you gave the printer on the other computer. Select it, close the Chooser, and you now are ready to print. Pretty cool, huh? Be aware that your new setup is not going to win any speed contests, but it works!

power up

DEVELOPMENT

Mercury Center Deconstruction: part 2

by Joseph O. Holmes

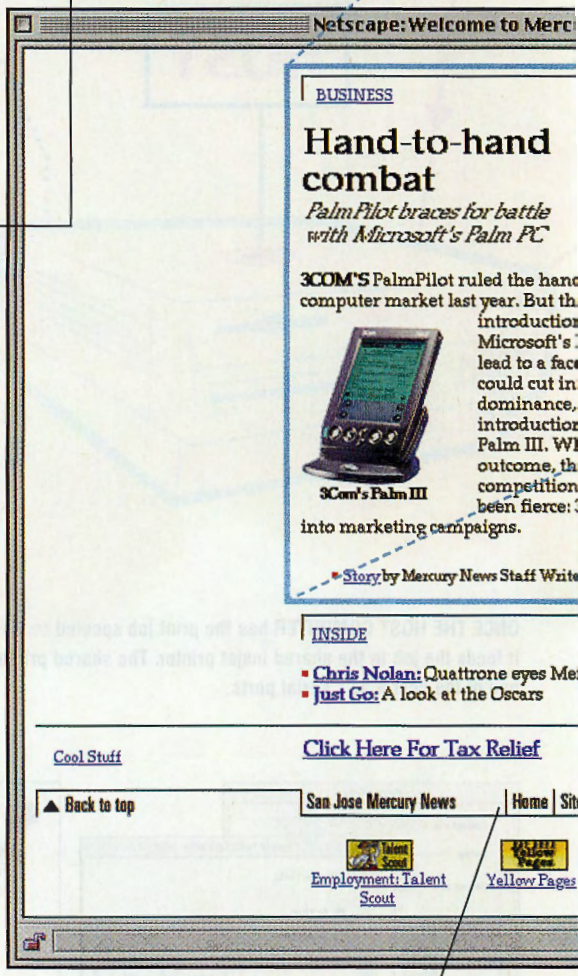
The Page: The Mercury Center welcome page (http://www.sjmercury.com), which greets visitors to the Web site of the *San Jose Mercury News.*

The Designer: Albert Poon, chief designer. JavaScript by Nick Heinle, Albert Poon, and Tim Colson.

The Tools: HTML editing on the Macs is done with Bare Bones Software's BBEdit (http://www.barebones.com).

Smart Design: The site is presented against a white background, which not only gives it a clean, newspaperlike appearance, but makes it easy for the designers to add graphical elements that blend in seamlessly.





JavaScript

Last month, we looked at some of the JavaScript behind the yellow triangles that magically appear when a visitor's mouse pointer passes over the links along the left side of the page. We showed you some of the script hiding inside the header, between <SCRIPT="JavaScript"> and </SCRIPT> tags, which set up variables and image pointers.

This month, let's view the page's source and take a look at the two event handlers that control the action, onMouseover and onMouseout.

These JavaScript components are put inside a hyperlink tag to control what happens when the mouse pointer passes over the link. Here's a simplified version of the code at each link:

```
<IMG SRC="/graphics/spacer.gif">
<A
HREF="http://www.mercurycenter.com/business/"
 onMouseover = "img_onarrow('pb');
return true" onMouseout = "img_offarrow('pb');
return true">Business & Stocks</A>
```

Event handlers such as these are permitted outside the <Script> tags because most browsers (Navigator 2.0 and later or Internet Explorer 3.0 and later) know how to interpret them directly.

On the Mercury Center page, the onMouseover handler calls the function img_onarrow('pb'), defined in the JavaScript in the header, which pulls up the yellow arrow image. The onMouseout command calls the function img_offarrow('pb'), pulling up the blank image.

For more on handlers, pick up a good JavaScript book such as *JavaScript: The Definitive Guide*, second edition, by David Flanagan (O'Reilly & Associates, 1997).

HTML

The look of this navigation bar matches that of the other bars on the site, but it wasn't created with tiny lines set around a text-based hyperlink. Instead, because it appears on all of Mercury's pages, the designers created it as a single graphic hyperlinked with image-map code.

If you've forgotten how to make an image map, take a moment to look over the HTML on the Mercury page (search for the word *toolbar* in the source code to find it).

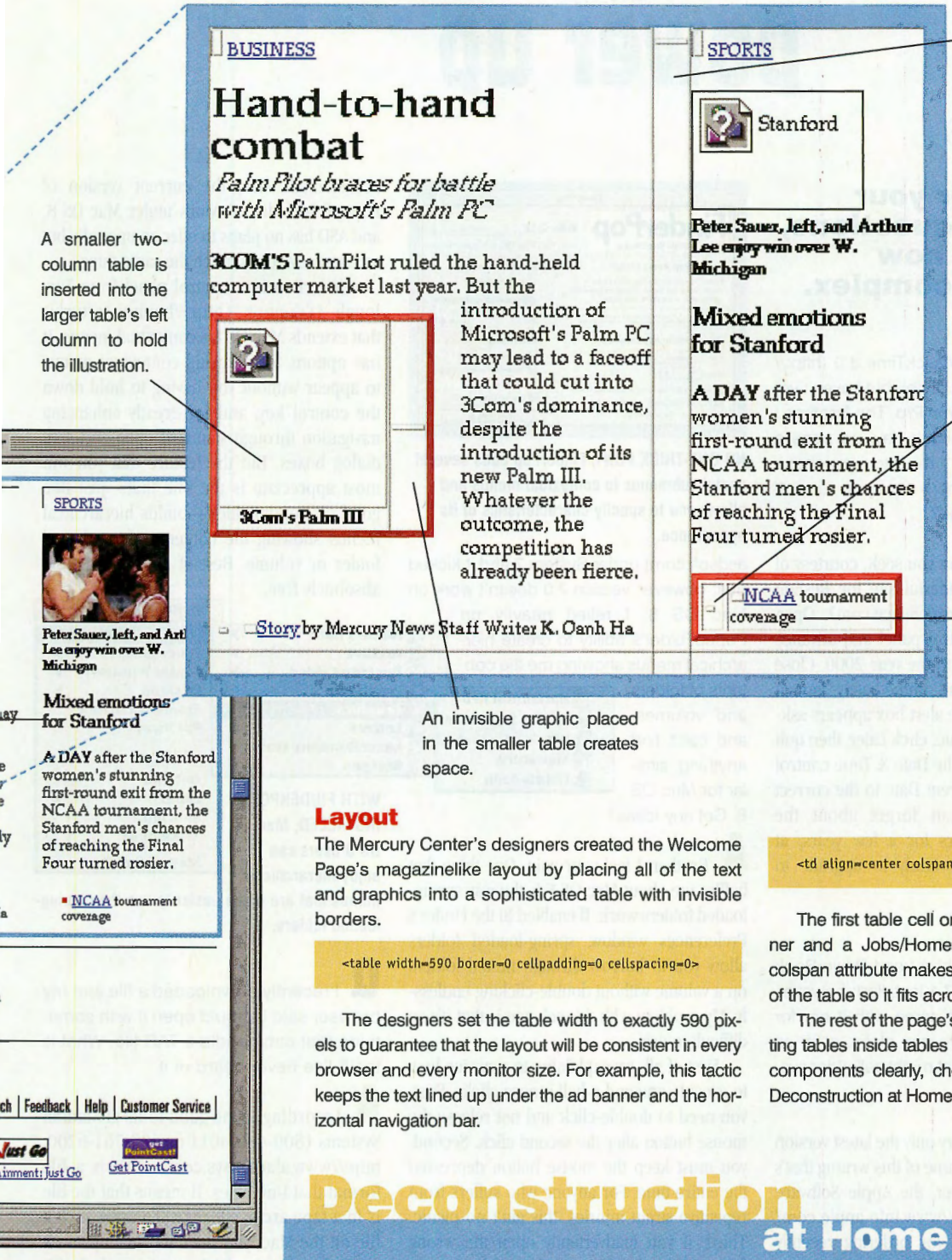
```
<A HREF="graphics/toolbar.map">
<IMG SRC="graphics/toolbar.gif" WIDTH="420"
HEIGHT="18" ISMAP usemap="#toolbar">
</A>
```

A hyperlink anchor is coded around the toolbar image. Inside the anchor, the ISMAP attribute tells the browser to treat the image as an image map. The usemap attribute points to a label elsewhere in the page, where the code sets up the shapes inside the image and the actual links.

```
<area shape=rect href="http://www.mercury
center.com/resources/map/"
coords=170,0,220,17>
```

The map shapes and links to which the usemap attribute point are placed inside a pair of map tags, <map name="toolbar"> and </map>, set out of the way at the very bottom of the page.

By the way, the Mercury designers do include ALT tag titles in all their images, but we've omitted these for simplicity.



A smaller two-column table is inserted into the larger table's left column to hold the illustration.

Look closely and you'll see that the larger table consists of three columns, including a thin, empty middle column as a spacer. (Of course, this larger table in turn is contained within the table that makes up the whole page.)

Again, an invisible graphic in the left column creates some white space.

Another small table in the larger table's right column holds a pointer.

An invisible graphic placed in the smaller table creates space.

Layout

The Mercury Center's designers created the Welcome Page's magazinelike layout by placing all of the text and graphics into a sophisticated table with invisible borders.

```
<table width=590 border=0 cellpadding=0 cellspacing=0>
```

The designers set the table width to exactly 590 pixels to guarantee that the layout will be consistent in every browser and every monitor size. For example, this tactic keeps the text lined up under the ad banner and the horizontal navigation bar.

```
<td align=center colspan=3>
```

The first table cell on the page contains the ad banner and a Jobs/Homes/Cars navigation graphic. The colspan attribute makes that cell span all three columns of the table so it fits across the top of the page.

The rest of the page's intricate layout is created by setting tables inside tables inside tables. To see all the table components clearly, check instruction 3 in the sidebar Deconstruction at Home.

Deconstruction at Home

Examining real Web sites at home is the best way to learn about site design. But remember this simple rule: Steal ideas, not words, images, or code.

Follow these steps for your at-home deconstruction:

1. Examine a page's source by selecting Document Source, Page Source, or Source from your browser's View menu.

2. Save a page's HTML source code as a text file on your hard drive by selecting Save As from your browser's File menu, and then selecting Source or HTML Source from the pop-up menu in the dialog box.

3. Check out the page's table layout (only Internet Explorer can see colored columns and rows, so you'll need that browser for this part of the experiment):

a. Open the HTML source in your word processor.

b. Use the search and replace function to replace BORDER="0" or BORDER=0 (depending on the page) with BORDER="4" BORDERCOLOR="RED".

c. Scroll through to make sure you haven't changed image borders to red as well.

d. Replace <tr> and <td> with <tr bordercolor="red"> and <td bordercolor="red"> to see the table columns and rows.

e. When you're finished, open the file in Explorer.

4. Check out a shareware solution, such as WebDevil (http://www.chaoticsoftware.com), which downloads all the components of a page, including graphics, so you can play with it offline.

power up

ASK US

We answer your technical questions, no matter how simple or complex.

Q I downloaded QuickTime 3.0 (http://www.apple.com/quicktime), but haven't yet upgraded to QuickTime Pro. The first time I launch MoviePlayer each day, up pops a reminder begging me to purchase QuickTime Pro. Is there a way to turn off this nagging message?



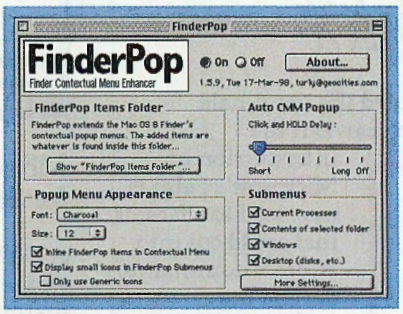
FIND FINDERPOP and StuffIt Expander on The Disc.

A Here's the solution you seek, courtesy of ResExcellence, a wonderful site for ResEdit users (http://www.resexcellence.com). Open the Date & Time control panel and advance Current Date forward to the year 2000. Close the control panel and immediately launch MoviePlayer. When the alert box appears asking if you want to update, click Later, then quit MoviePlayer. Reopen the Date & Time control panel and return Current Date to the correct setting. Now you can forget about the MoviePlayer reminders for a few years, at which time you'll be ready to upgrade to QuickTime 2000.

Q I recently bought a used PowerBook 165c. It has System 7.1 installed; however, the floppy disks that came with it are for System 6.0.7. Is there any place, such as Apple or a reseller, that might sell older system disks?

A Most retailers carry only the latest version of the Mac OS (at the time of this writing that's Mac OS 8.1). However, the Apple Software Updates site (http://www.info.apple.com/swupdates) has links for ordering recently discontinued packages, plus you can download free disk images for System 6.0.3, 6.0.5, 6.0.8, 7.0, and 7.0.1. If you want to get really retro, contact Sun Remarketing (800-821-3221 or 801-755-3360, http://www.sunrem.com). These guys have everything dating back to System 3.2 for the Mac 512K.

Q One thing I find very annoying about Mac OS 8 is the spring-loaded folder feature. Yeah, it's cool for novices, but it's so—well, unsophisticated. I used PopupFolder (ASD Software, 909-624-2594, http://www.asdsoft.com) under System 7 and it kicked butt; however, version 2.0 doesn't work on Mac OS 8. I relied heavily on PopupFolder's ability to create hierarchical menus showing me the contents of folders and volumes, and can't find anything similar for Mac OS 8. Got any ideas?

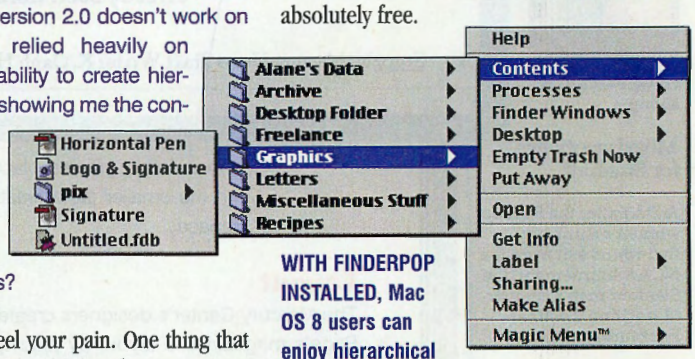


NO ONE-TRICK PONY, FinderPop adds several useful submenus to contextual menus and allows you to specify characteristics of its appearance.

A Brother, I feel your pain. One thing that baffles me about Mac OS 8 is the way spring-loaded folders work. If enabled in the Finder's Preferences window, spring-loaded folders allow you to burrow through nested folders on a volume without double-clicking endlessly. My problem with this scheme is that it's so difficult to use.

First of all, try explaining to a novice how to execute one-and-a-half mouse clicks. First, you need to double-click and not release the mouse button after the second click. Second, you must keep the mouse button depressed the entire time. For anyone who suffers from repetitive strain injuries, this ain't no picnic. Third, if you inadvertently open the wrong folder, it's hard to figure out how to backtrack. Fourth, if you drag the cursor off the desktop by mistake, all your painstakingly opened windows snap shut in an instant. Finally, the thing that's most annoying about spring-loaded folders is that someone else had already figured out a perfectly wonderful way of accomplishing the same thing. As you mentioned, with PopupFolder you clicked on a volume and waited a second for a hierarchical menu to pop up right on the desktop. Burrowing down through levels was as easy as choosing from the Apple Menu Items folder, a procedure to which every Mac user was already accustomed. Alas, the current version of PopupFolder doesn't work under Mac OS 8, and ASD has no plans to offer an upgrade, but an alternative does much the same thing.

FinderPop is a control panel from Turlough O'Connor (http://bounce.to/turly) that extends Mac OS 8's contextual menus. It has options for allowing contextual menus to appear without you having to hold down the control key, and for greatly enhancing navigation through standard open and save dialog boxes. But the feature that you will most appreciate is the one that—just like good ol' PopupFolder—builds hierarchical menus showing the contents of a selected folder or volume. Best of all, FinderPop is absolutely free.



WITH FINDERPOP INSTALLED, Mac OS 8 users can enjoy hierarchical menus that are much easier to use than spring-loaded folders.

Q I recently downloaded a file and my browser said I should open it with something that can handle a TAR file. What is that? I've never heard of it.

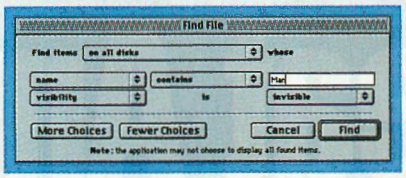
A According to the good folks at Aladdin Systems (800-480-4011 or 408-761-6200, http://www.aladdinsys.com), TAR is a file format that Unix uses. It means that the file is in a tape archive format. To open such a file on the Mac, you need to decompress it with the commercial version of StuffIt Deluxe 4.5, because the shareware StuffIt Expander doesn't have the necessary translation engine.

Q Whenever I run the Disk Doctor portion of Norton Utilities 3.5 on my Power Mac 7600/132, it uncovers a major problem involving an error in the catalog b-tree. This happens regardless of whether I'm running System 7.6, Mac OS 8.0, or Mac OS 8.1. It also occurs on my daughter's Power Mac 7200. It even

shows up on a totally reinitialized hard drive with Mac OS 8.1 and little else installed. What gives?

A For help in answering this question, I turned to the Norton Utilities experts: Symantec (800-445-4208 or 408-253-9600, http://www.symantec.com). A Symantec technical support representative says, "The catalog b-tree is one part of the directory structure of the Macintosh. It stores the location of all of the files on the hard drive. The Mac stores info via two systems: Hierarchical File System (HFS) or HFS+ (Apple's new version of the HFS structure in Mac OS 8.1). The catalog b-tree is basically one part of the HFS structure. It is similar to a large filing cabinet that keeps track of the names and locations of all of your files. Since it is the structure that has a record of all of the files on your drive, it is most prone to experience corruption due to crashes, freezes, and system errors. If your computer experiences a problem in the file system, it is most likely in the catalog b-tree. Thus users will frequently see that Disk Doctor is reporting catalog b-tree problems."

Q I used to have a find function in open and save dialog boxes, courtesy of Wunderbar. Then I updated to Mac OS 8. Now I have to try to remember where in tarnation I put things because Wunderbar doesn't work with Mac OS 8. Is there an OS 8–compatible find function for open and save dialog boxes?



ACTION FILES ADDS A NUMBER of useful features to open and save dialog boxes, not the least of which is a fully functional find command.

A There sure is. What you're looking for is Action Files from Power On Software (800-344-9160 or 330-735-3116, http://www.actionutilities.com). Action Files adds a powerful find feature to open and save dialog boxes, and it modifies these dialog boxes in many other useful ways (see our review, Jul/98, p58). It has taken the place of a half-dozen shareware and freeware extensions that used to clog my System Folder, including SuperBoomerang, Default Folder, Dialog View, and others.

Q How do I clean my PowerBook screen?

A If you crack open the documentation that came with your PowerBook, you'll find the following advice from Apple: "Clean the computer's outside surfaces with a damp (not wet) cloth. Clean the screen with soft, lint-free paper or cloth and a mild glass cleaner. Do not spray the glass cleaner directly onto the screen."

Q I sometimes try to arrange my icons neatly on my desktop to add some order to my life. However, when I restart, my two hard drive icons always move back to their original location at the top right of the screen! I was wondering, is there a way to get these icons to behave and stay where I put them on the screen?

A By default, the Mac always displays available volumes along the upper right-hand of the Finder's desktop, and until recently there was nothing you could do about it. However, there are now several freeware and shareware programs—such as Desktop Icon Manager by G.J. Parker, Desktop Resetter by Nick D'Amato, and DesktopMaid by Tom Bovo—that can remember where all of your icons were and restore them automatically whenever you restart or change resolutions. Each utility operates a little differently, but with several to choose from, one is bound to meet your needs.

Q Can I add an internal 56-Kbps modem to my desktop Mac?

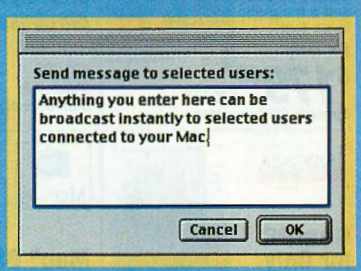
A Internal K56flex modems come preinstalled on some Power Mac 6500s and are available as an option on build-to-order G3 computers. If you want to add such a modem to a Power Mac 6500 or G3 you already own, you can purchase the Apple/GV 56K modem (part number 652-0038) by contacting an Apple-authorized service provider. Sometime this summer Apple plans to offer owners of these modems an update that complies with the new V.90 standard for universal 56-Kbps support.

Apple currently does not offer K56flex modems for owners of Power Macs and Performas in the 4400, 5400, 5500, 6200, 6300, 6400, and 6500 series. Nor does Apple plan to update the Apple Telecom software for the internal GeoPort modem or the external GeoPort Telecom Adapter beyond the V.34 standard (33.6 Kbps) the latest version supports. Apple Telecom 3.1.1 is available from the Apple Software Updates site (http://www.info.apple.com/swupdates), and is on the Mac OS 8 CD in the CD Extras folder. If you have one of these older Mac models with a slower internal modem, to upgrade you must remove both the modem and the plastic cap covering the modem port on the rear of the computer, then attach an external modem and install the accompanying software.

Owen W. Linzmayer (askus@macaddict.com, http://www.netcom.com/~owenink) is a San Francisco–based freelance writer and the author of *The Mac Bathroom Reader*. Please submit technical questions or helpful tips directly via email or c/o *MacAddict*, 150 North Hill Drive, Suite 40, Brisbane, CA 94005.

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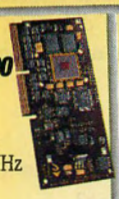


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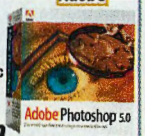
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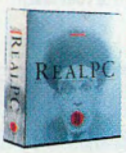
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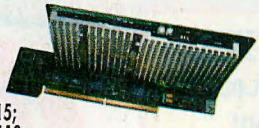
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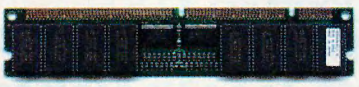
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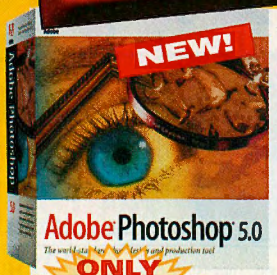
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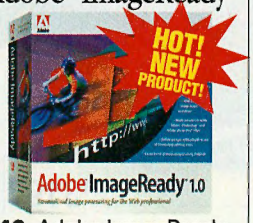
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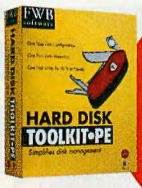
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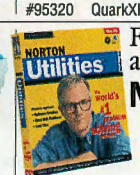
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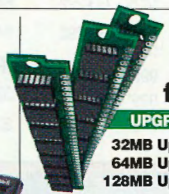


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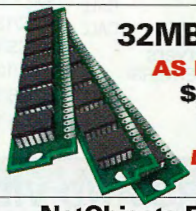
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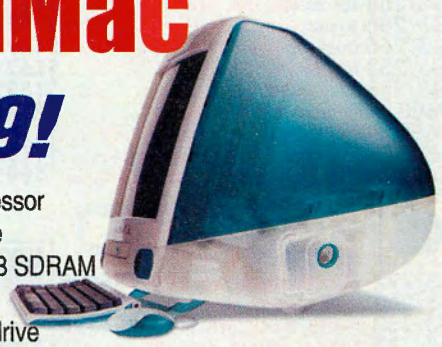
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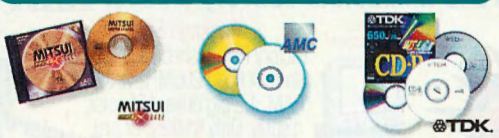
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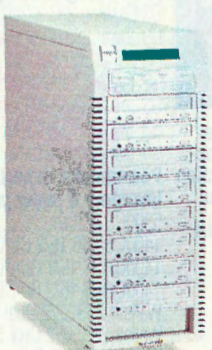
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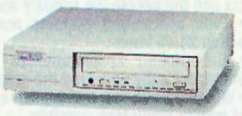
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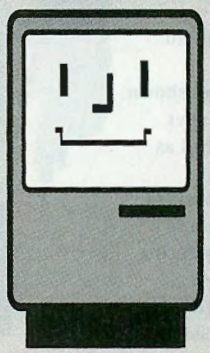
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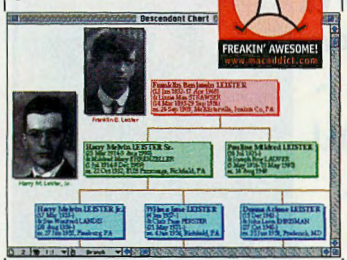
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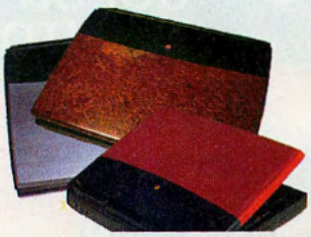
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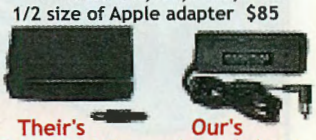
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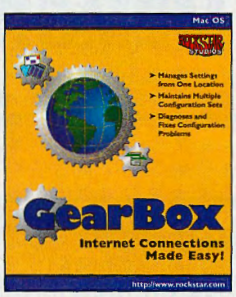
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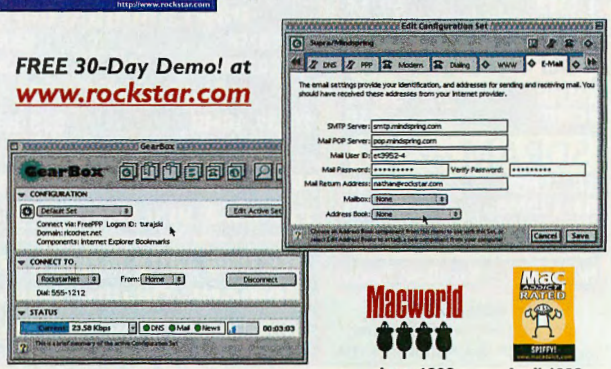
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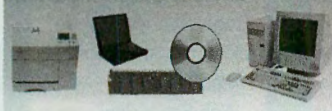
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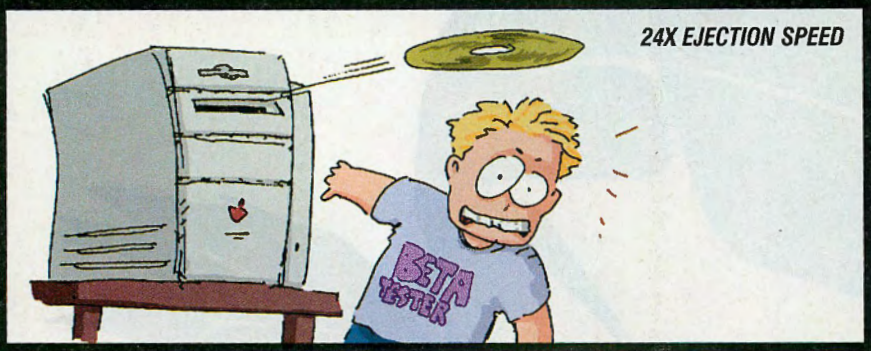
What he said:	What he meant:
"I'd be so bold as to say that 10 years from now, personal computers would be able not only to recognize speech but to understand it as humans do when they are conversing with each other."—Bill Gates on the future of computers, at an April technology conference.	Ten years from now, Windows will be made of people! People!
"My confidence in Netscape has never been higher."—Netscape co-founder Marc Andreessen, who registered to sell 25 percent of his stock after the company announced an $88 million loss.	Microsoft scares me. I think I just peed my pants.
"We've been hoping and waiting for this strategy for over three years. This is absolutely the right way to move Mac OS forward. It will be a pleasure to quickly move Macromedia's products to Mac OS X."—Macromedia president Norm Meyrowitz at Apple's Worldwide Developer Conference.	Bill Gates isn't the only one who can make sweet deals with Apple.
"The entire PC industry has a large stake in the introduction and success of Windows 98. An injunction delaying Windows 98 would clearly have a negative impact on the country as a whole."—Compaq Computer CEO Eckhard Pfeiffer in a public statement urging the U.S. Justice Department not to delay the release of Windows 98.	Microsoft scares me. I think I just peed my pants.
"I have worked through my disappointment in the way Steve Jobs treated me but shall never forget the pain of it."—Ex-Apple CEO Gil Amelio in his book, *On The Firing Line: My 500 Days at Apple*.	Steve Jobs scares me. I think I just peed my pants.

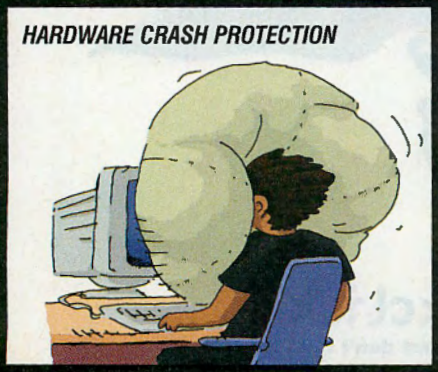
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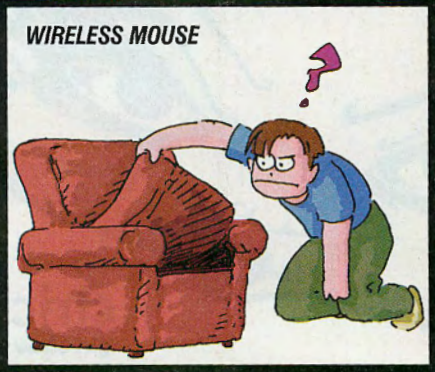
When drawing up plans for Apple's fashionable new consumer computer, the iMac, members of Apple's Industrial Design team ditched boring beige in favor of unconventional colors they're calling Bondi Blue (named after a hip Australian beach) and Ice. Although no one's talking about which colors didn't make the cut, we've got the inside scoop on a few of the rejected color castoffs:

- *MacAddict* Web Site Yellow
- L.A. Smog
- Communist Red
- VISA Platinum
- Purple Rain
- Cleveland Brown
- New York Grime
- Clockwork Orange

LEAST REQUESTED MAC FEATURES







Doodle by Mark Simmons

IDENTITY CRISIS

Adobe Systems CEO John Warnock makes few public appearances. One is forced to wonder if it's because he's too busy popping corn or wrapping presents. Next from Adobe: the Movie Theater Butter-flavored Post-XMAS graphics file format for the Web—for good little boys and girls only.



Pssst, Over Here!

Apple kept the iMac so hush-hush that many people at the company didn't even know the computer was in the works. But that's not all that nobody's telling us. The following previously unrevealed secrets are still being kept:

- The day Apple announced the iMac, the company also quietly announced a new line of PowerBooks.
- Apple's recently unveiled iMac is mysteriously missing a floppy drive. No one at Apple seems to know where it went.
- Mac OS X, Apple's future operating system, is secretly being called Mac OS "Ten" by a select few at the company.
- Apple interim CEO Steve Jobs is still the CEO of Pixar Animation Studios and occasionally even stops by its offices to see how things are going.

TURTLE SOUPED



G3 SPEED

"...the card that produced by far the best performance for its price was XLR8's MACh Speed G3 220. Although the processor on this card is rated at 220MHz, its default settings can push it to 260MHz. In some of our tests it managed to beat cards rated at 250MHz," as reported by MacUser UK.

"I feel XLR8's entry into the market with lower priced models (and with far more adjustability than anything on the market at that time) helped bring prices down which benefited all Mac owners," reported Michael Breeden, web master for AccelerateYourMac.com.

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